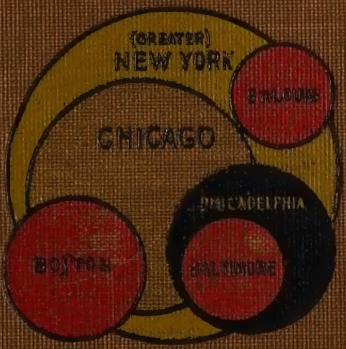
HOW TO DO
BUSINESS

AS BUSINESS IS DONE IN

GREAT COMMERCIAL CENTERS



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Seymour Eaton

HOW TO DO

BUSINESS

AS BUSINESS IS DONE IN GREAT COMMERCIAL CENTERS

...BY...

SEYMOUR EATON

Director of the Department of Industry and Finance,
Drexel Institute, Philadelphia

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Banking, Collections, and Negotiable Paper.

Ancient Banking.

The antiquity of banks is very great. In the Metropolitan Museum of Art, in New York, are Babylonian tablets bearing distinct records of transactions in banking that took place in the reign of Nebuchadnezzar. The origin of modern banking may be traced to the money dealers of Florence, who were in high repute as receivers and lenders of money in the fourteenth century. The name *bank* is derived from the Italian *banco*, a bench, the Jews in Lombardy having benches in the market place for the exchange of money. When a banker failed his bench was broken by the populace, and from this circumstance we have our word *bankrupt*. The business of borrowing and lending money was undertaken first by goldsmiths, although the two had no direct connection. In the process of the separation of employments, which is characteristic of an advancing society, banking became a business of its own.

The Bank of England.

The Bank of England was the fourth important national bank founded in Europe. The Bank of Venice was the first in date. The Bank of England is more than two hundred years old, and is to-day acknowledged to be the greatest financial institution in the world. It had a capital at commencing of six millions. The building covers a whole block bounded on the south by the famous

Threadneedle Street. Outside it presents the appearance of a blind outer wall of a great building without windows, and having here and there ornamental pillars and a few entrances. The plan, as shown in our illustration, is a complex system of light-walls,

PLAN OF THE BANK OF ENGLAND.

offices, court yards, etc., the result of growth and necessity. Among the curiosities in the bank library is a million pound bank note. Tradition says, that there have been only four such notes issued. Samuel Rogers, the poet, had one framed and hung over his parlor mantelpiece. Among other curiosities in the bank

library is a note for £25, which had slumbered unobserved for 111 years, and was then presented and paid. If compound interest had been payable by the bank, the owner could have claimed over £60,000. About 50,000 notes of different values are paid into the bank every day. These are kept five years in the bank cellars and are then destroyed by burning. New notes are always given out in payment of bills and checks. The first bank founded in America was the Bank of North America, in Philadelphia, which was established in 1782.

The Value to Business Men of Banks.

Banks are absolutely necessary to the success of modern commercial enterprises. They provide a place for the safe-keeping of money and securities, and they make the payment of bills much more convenient than if currency instead of checks were the more largely used. But the great advantage of a banking institution to a business man is the opportunity it affords him of borrowing money, of securing the cash for the carrying on of his business, while his own capital is locked up in merchandise or in the hands of his debtors. Another and important advantage is to be found in the facilities afforded by banks for the collection of checks, notes, and drafts.

Currency.

The legal medium of exchange of a country is called its currency, that which passes current, or circulates as money, such as coin and bills. *Bullion* is uncoined gold or silver. More than ninety per cent. of the *cash* circulation of the country is represented by checks, etc., and not by actual money.

Opening a Bank Account.

When you enter a bank to open an account, inquire for the cashier, and, if convenient, take with you some one who can introduce you and identify you as the person you profess to be. If you go alone, do not feel hurt if a number of questions are asked you. While you may be perfectly honest, a large number of people make their living by being sharp, and, besides, it is necessary to establish those confidental relations which ought to exist in all financial transactions, so that the cashier may know something more about you than he could ascertain by merely looking at you,

and taking your name on a book. The cashier will have you place your signature in a book. Your name as written in this book should be the same in style as you intend to place on your checks. If necessary, the cashier or some officer of the bank, will show you how to make out a deposit slip. He will give you also a small bank book, in which you will be credited with the amount of money which you deposit. Each time you deposit money you will be required to make out a deposit slip. The banks furnish the printed blanks free. Under the word *checks* on the blank you write the names of the banks upon which the checks, if any, which you are depositing, are drawn. If a check is on a distant city, the name of the city should be given. Your bank book is in reality your only receipt from the bank for the money you deposit. When you deposit money hand it to the receiving teller, and when you wish to draw money present your check to the paying teller. When you wish to have your bank book balanced hand it to the receiving teller. This is usually done on the first of each month. The paid or cancelled checks are returned to you in a day or two when you get your bank book back. These should all be filed in an orderly way. They serve as vouchers and may be useful in legal complications.

DEPOSITED IN

The Union Trust Company,

715, 717 & 719 Chestnut St., Philadelphia.

By Penny Wise & Co

Mar 12 1895

	DOLLARS.	CTS.
Bank Notes, . .	240	—
Small Notes, 1's and 2's,	37	—
Coin, ...	5	—
Check, (ENTER SINGLY) If in the city, name of bank; if out of the city, name of place where payable.		
Penn Nat.	42	80
West Chester	33	27
Chemical, N.Y.	3	42
Am Ex. Order	5	33
P.O. Money Order	10	—
Total, ...	$376	82

The Officers of a Bank.

The directors of a bank meet regularly to consider the character of the paper offered for discount, and to consult regarding the general business of the bank. Sometimes the directors give the president or cashier authority to pass upon paper offered for discount. The ordinary officers of a bank are the president, who is the chief executive officer; the cashier, who is the manager of the internal workings of the bank; the paying teller, who pays out all moneys and has charge of the working cash of the bank; he is familiar with the signature of each depositor and with his daily balance, and is really one of the most important officers of the bank. The paying teller should be a man of good ability, a man who can read motives from appearances, a man of quick and accurate judgment, and withal, a man of patience and unwavering good nature. The receiving teller receives all moneys coming into the bank, and makes the entries in the depositors' pass books. The note clerk has charge of the commercial paper handled. The book-keeper and his assistants have charge of the ledgers and other account books.

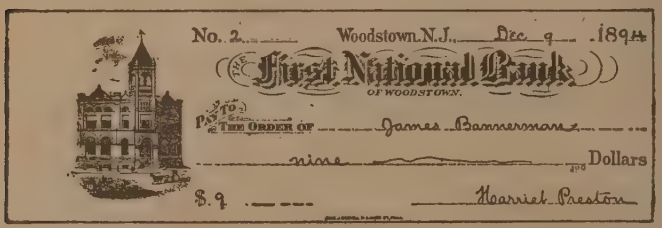
Suggestions to Bank Clerks.

Ability, enthusiasm, tact and determination are as necessary in banking as in any other commercial situations. Many of the most successful bankers in the country commenced as messengers and passed from one office to another until they became presidents. It should be the constant endeavor of officers of a bank who hold superior positions to cultivate and develop the self-respect of their subordinates. Faithful service and manly character in a janitor are entitled to just as much honor and to as full recognition as that rendered by a cashier. The man makes the place, not the place the man. It is the general opinion of bankers that the demand for the right sort of bank-clerk is much in excess of the supply. No young man should think of entering upon banking as a profession who has not a real love for the business. The best position for a young man, and the one affording the largest opportunity for promotion will be that of general assistant. It is considered better to enter upon a clerkship in a small bank than in a very large one, for the reason that the steps in the ladder of success are fewer and closer. The successful clerk must have a

true appreciation of the value of time. Every minute should be strictly given to the work of the bank. In the matter of promptness the higher officers should set a good example for those in subordinate positions. There are exceptions, but as a rule, promotions are not the result of chance. The man in any calling who has the ability and the desire to do greater things will sooner or later be called upon to do them.

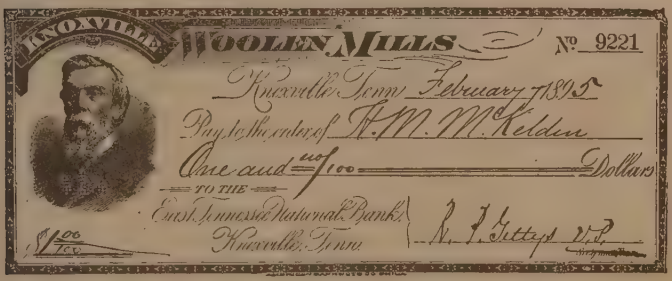
Bank Checks.

A check is an order for money, drawn by one who has funds in the bank, payable on demand. It is in reality a sight draft on the bank. Banks provide blank checks for their customers, and it is a very simple matter to fill them out properly. In writing in the amount begin at the extreme left of the line. The illustration given here shows a poorly written check and one which could be



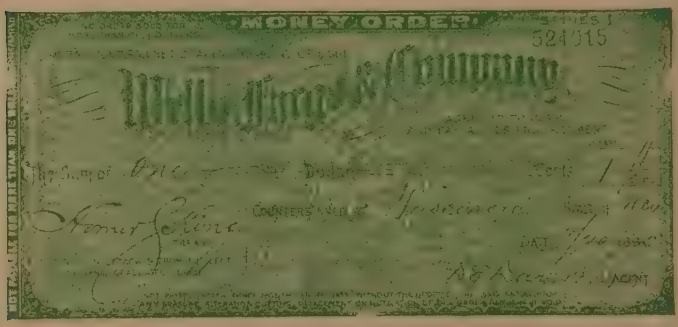
very easily raised. A fraudulent receiver could, for instance, write "seventy" before the *nine* and "7" before the figure "9," and in this way raise the check from $9 to $79. If this were done and the check cashed, the maker, and not the bank would become responsible for the loss. You cannot hold the bank responsible for your carelessness. A check was raised from $100 to $190 by the writing "*and ninety*" after the words "one hundred." One of the ciphers in the figures was easily changed to a "9" by adding a tail to it. It is wise to draw a running line~~~~~ after the amount in words, thus preventing any additional writing. Checks should be dated, but the absence of a date does not warrant a bank in refusing to cash the check. Notes made and executed on Sunday are invalid, but a check so dated is good. The signature should be in your usual style familiar to the paying teller. A check is a draft or order on a bank, and

need not necessarily be written in the prescribed form. Such an order written on a sheet of note-paper with a lead pencil might be in every way a legally good check. If it is necessary, any time, to write a check for a fractional part of a dollar, as 75 cts., write "*Seventy Five Cents*," and draw your pen through the printed word *Dollars*. There hangs in the office of the Pacific Mills,



Boston, the cancelled check of the United States for *one cent*; and on the walls of the Bank of Commerce, New York City, hangs a handsomely framed check for $14,000,000, signed by the well-known banking house of Kidder, Peabody & Co. Usually checks should be drawn "to order." The words, "Pay to the order of John Brown" mean that the money is to be paid to John Brown or to any person he *orders* it paid to. If a check is drawn "Pay to Bearer," any person, that is the bearer, can collect it. The paying teller may ask the person cashing the check to write his name on the back simply to have it for reference. In writing and signing checks use good black ink and let the copy dry a little before a blotter is used. Safety devices to prevent the fraudulent alteration of checks are of almost endless variety, but there has not been a preventive against forgery and alterations yet invented which has not been successfully overcome by swindlers. A machine for punching out the figures is in common use, but the swindler has successfully filled in the holes with paper pulp and punched other figures to suit his purposes. The method adopted by the express companies and by the post office department in its new money order is perhaps the best plan yet offered to prevent the raising of the amount of a check or order. We give here a photo-engraved copy of a Wells, Fargo Express order to illustrate this point.

Notice the printing on the left end. To raise such an order it would be necessary to add to the length of the paper, which of course would be impossible. The most experienced bankers favor a plain black and white check, drawn upon clear white paper with good strong black ink. There are often presented to banks for payment, checks in which the figures in the margin do not correspond with the amounts stated in writing in the body of the checks. The law



governing cases of this sort provides distinctly that the amount in writing shall be considered correct. If the amount of money involved were large, the paying teller would be justified in withholding payment until he satisfied himself that the amount in writing was what the maker really intended the check to call for.

Identification.

The banks of this country make it a rule not to cash a check that is drawn payable to order, unless the person presenting the check is known at the bank—or unless he satisfies the paying teller that he is really the person to whom the money is to be paid. It must be remembered, however, that a check drawn to order and then endorsed in blank by the payee is really payable to bearer, and if the paying teller is satisfied that the payee's signature is genuine he will not likely hesitate to cash the check. In England, all checks apparently properly endorsed are paid without identification. In drawing a check in favor of a person not likely to be well-known in banking circles, write his address or his business after his name on the face of the check. For instance, if you

should send a check to John Smith, Boston, it may possibly fall into the hands of the wrong John Smith; but if you write the check in favor of "John Smith, 849 Tremont St., Boston," it is more than likely that the right person will collect it. If you wish to get a check cashed where you are unknown, and it is not convenient for a friend who has an account at the bank to go with you for the purpose of identification, ask him to place his signature on the back of your check, and you will not likely have trouble in getting it cashed. By placing his signature on the back of the check he guarantees the bank against loss. A bank is responsible for the signatures of its depositors, but it cannot be supposed to know the signatures of endorsers. The reliable identifier is in reality the person who is responsible.

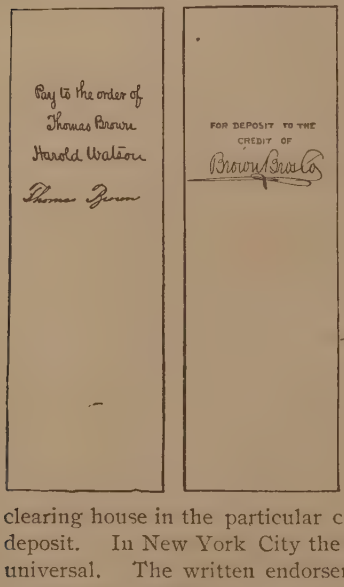
A Banker's Hints.

Do not draw a check unless you have the money on deposit or in your possession to deposit. Do not test the generosity of your bank by presenting, or allowing to be presented, your check for a larger sum than your balance. Do not draw a check and send it to a person out of the city expecting to make good the amount before it gets back. Do not give your check to a friend with the condition that he is not to use it until a certain time. Do not send ignorant and stupid messengers to the bank to transact your business.

Check Endorsements.

In endorsing checks note the following points: 1. Write across the back—not lengthwise. 2. If your endorsement is the first, write it an inch or two from the top of the back; if it is not the first endorsement write immediately under the last endorsement. 3. Don't endorse wrong end up; the top of the back is the left end of the face. 4. Write your name as you are accustomed to write it, no matter how it is written on the face. 5. If you are depositing the check write or stamp "For Deposit" over your signature. This is hardly necessary if you are taking the check yourself to the bank. A check with a simple or blank endorsement on the back is payable to bearer, and if lost, the finder might succeed in collecting it, but if the words "For deposit" appear over the name, the bank officials understand that the check is

intended to be deposited, and they will not cash it. 6. If you wish to make the check payable to some particular person by endorsing, write "*Pay to* .....(NAME)..... *or order*," and under this write your own name as you are accustomed to sign it. 7. Do not carry around endorsed checks loosely. Such checks are payable to bearer, and may be collected by any one. 8. If you receive a check which has been transferred to you by a *blank* endorsement, and you wish to hold it a day or two, write over the endorsement the words "*Pay to the order of* .....(YOURSELF)....." This is allowable legally. The check cannot then be collected until you endorse it. 9. An authorized stamped endorsement is as good as a written one. Whether such endorsements are accepted or not depends upon the regulations of the clearing house in the particular city in which they are offered for deposit. In New York City the use of stamped endorsements is universal. The written endorsement is safer for transmission of out-of-town collections. 10. If you are endorsing for a company, or society, or corporation, write first the name of the company and then your own name followed by the word "*Treas.*" 11. If you have power-of-attorney to endorse for some particular person, write his name followed by your own, followed by the word "*Attorney*" or "*Atty*" as it is usually written. 12. Where checks are sent out by the receiving (deposit) bank to all parts of the country for collection, it is customary for the bank to stamp upon the back of the check the words "ENDORSEMENT GUARANTEED." Sometimes a check reaches a bank through responsible parties, who are not its payees, without bearing the payee's endorsement. The bank may decide to pay without demanding the absent endorsement, since such a demand would cause considerable delay and trouble, if the presenter or the presentee of the check guarantees the absence of the



endorsement. This he does by writing "*Absence of endorsement guaranteed*," with his signature, on the back of the check. Of course, this is practically a guarantee against loss and trouble to the banker, which might result from the absence of the endorsement. The banks of some cities will not accept such guarantee. It is sometimes permissable to endorse the payee's name "by (YOUR OWN NAME)" This may be done by a junior member of a concern when the person authorized to endorse checks is absent, and the checks are deposited and not cashed. If a check lacks the endorsement of the original payee, it may be wise, if convenient to do so, to get it certified before sending it back for such endorsement. 13. Write your check payable to the order of some person, but don't write "Pay to the order of *Chas. Hood & Co., for subscription to Ledger for 1897.*" Such information on a paid check may serve some purpose of yours, but it is not good business. Descriptive and qualifying matter is quite proper in the letter accompanying the check, and if the letter has been copied, it is just as legally valuable. 14. Do not write any unnecessary information on the back of your check. A story is told of a woman who received a check from her husband, and when cashing it, wrote "Your loving wife" above her name on the back.

Cashing your own Check.

If you wish to draw money from your own account, the most approved form of check is written "Pay to the order of *Cash.*" This differs from a check drawn to "*Bearer.*" The paying teller expects to see you yourself or some one well-known to him as your representative, when you write "*Cash.*" If you write "Pay to the order of (YOUR OWN NAME)," you will be required to endorse your own check before you can get it cashed.

Checks for Special Purposes.

If you wish to draw a check to pay a note, write "Pay to the order of *Bills Payable.*" If you wish to write a check to draw money for wages, write "Pay to the order of *Pay Roll.*" If you wish to write a check to pay for a draft which you are buying, write "Pay to the order of *N. Y. Draft and Exchange*," or whatever the circumstances may call for.

"No Funds."

If you have deposited a check and it is returned through your bank marked "*No Funds*," it signifies that the check is worthless and that the person upon whose account it was drawn has no funds to meet it. Your bank will charge the amount to your account. The best thing to do in such a case is to hold the *protested* check as evidence of the debt and write the person who sent it to you giving particulars and asking for an explanation. There is no advantage in having the check protested unless it has an endorser other than yourself. One of the bankers' journals gives an instance of a man who had a check

for $900, which he took to get cashed. He learned that the drawer had only $700 on deposit, and knowing that he (the drawer) was embarrassed financially, the man deposited to the drawer's credit $200 of his own money, and then presented his $900 check and had it cashed.

Stopping Payment.

If you wish to stop the payment of a check which you have issued you should notify the bank at once, giving full particulars of the check.

Cancelling Checks.

Banks have a custom, after paying and charging checks, of cancelling them by punching or by making some cut through their face. These cancelled checks are returned to the makers at the end of each month.

Checks presented after Death.

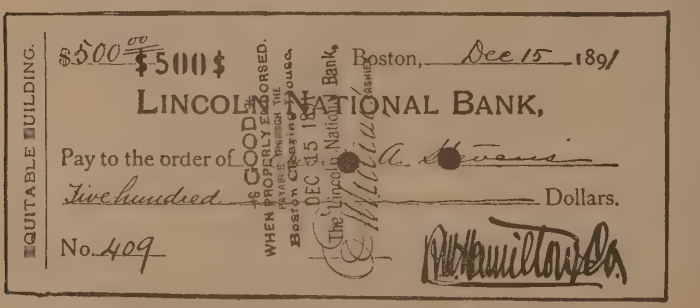
As a general rule banks are expected to stop the payment of a check, the signer of which has died before its presentation. This is not always possible for the reason that information as to the death of a customer may not reach the bank for days, so that in reality banks are every day paying checks of men who are dead. In Massachusetts, checks are good for ten days after the death of the signer.

Checks should be Numbered.

Checks should be numbered so that each can be accounted for. The numbers are for your convenience and not for the convenience of the bank. It is important that your check book be correctly kept, so that you can tell at any time how much money you have in the bank. At the end of each month your small bank book should be left at the bank so that the book-keeper may balance it. It may happen that your bank book will show a larger balance than your check book. You will understand by this, if both have been correctly kept, that there are checks outstanding which have not yet been presented at your bank for payment. You can find out which these are by checking over the paid checks that have been returned to you with your bank book. The unpaid checks may be presented at any time, so that your actual balance is that shown by your check book. Checks should be presented for payment as soon after date as possible.

Certified Checks.

If you wish to use your check to pay a note due at some other bank, or in buying real estate, or stocks, or bonds, you may find it necessary to get the check certified. This is done by an officer of the bank who writes or stamps across the face of the check the words "*Certified*" or "*Good when properly endorsed,*" and signs his name. See illustration. The amount will immediately be

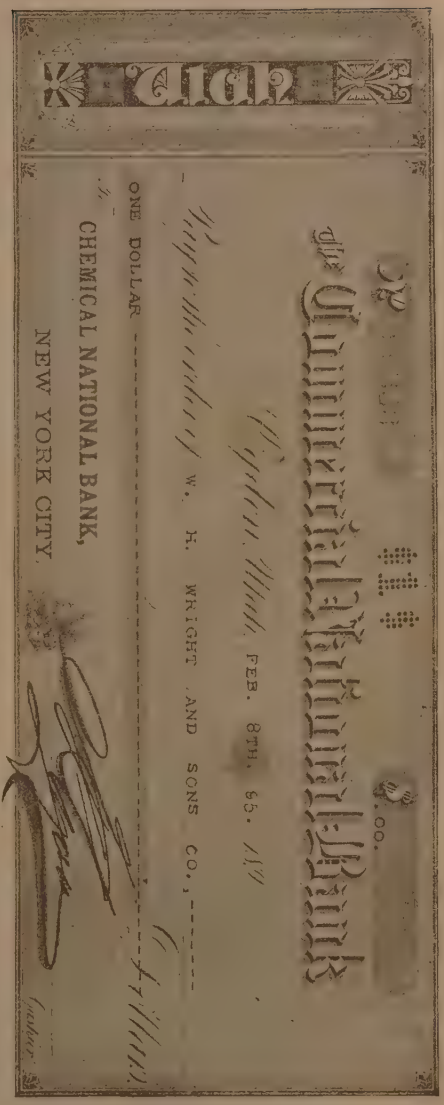


deducted from your account, and the bank, by guaranteeing your check, becomes responsible for its payment. Banks will usually certify any check drawn upon them if the depositer has the amount called for to his credit, no matter who presents the check. If you should get a check certified and then not use it, deposit it in your bank, otherwise your account will be short the amount for which it is drawn. In Canada, all checks are presented to the "ledger keeper" for certification before being presented to the paying teller.

Bank Drafts.

Your bank check is really your sight draft on your bank. Of course it differs from an ordinary commercial draft, not only in its wording, but in its purpose. A check is used for paying money to a creditor, while a draft is used as a means of collecting money from a debtor. The bank is obliged to pay your check if it has funds of yours sufficient to meet it, while the person upon whom your draft is drawn may or may not honor it at his pleasure. Banks keep money on deposit in one or more other banks located in some of the commercial centres. Nearly all large banks keep

money on deposit with one or more of the New York City banks. They call these banks their New York *correspondents*. A bank draft is simply the bank's check, drawing on its deposit with some other bank. Banks sell these checks to their customers. Merchants make large use of these drafts, or cashier's checks as they are sometimes called, in making remittances from one part of the country to another. These drafts or checks pass as cash anywhere within a reasonable distance of the money centre upon which they are drawn. Banker's *drafts on New York* would, under ordinary financial conditions, be considered cash anywhere in the United States. A draft on a foreign bank is commonly called a *bill of exchange*. Bills of exchange are usualy drawn in duplicate, one of which is forwarded and the other retained. They are so worded that when the



original is paid the duplicate becomes void. They are drawn in the currency of the country where they are made payable. These drafts are used to pay accounts in foreign countries just as drafts on New York are used to pay indebtedness at home.

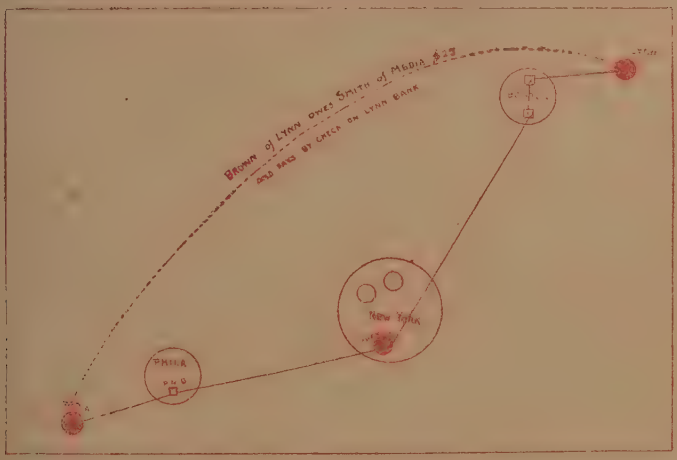
The Clearing-House System.

In large cities checks representing millions of dollars are deposited in the banks every day. The separate collection of these would be almost impossible, were it not for the clearing-house system. Each large city has its clearing-house. It is an establishment formed by the banks themselves, and for their own convenience. The leading banks of a city connect themselves with the clearing-house of that city, and through other banks with the clearing-houses of other cities, particularly New York. Country banks connect themselves with one or more clearing-houses through city banks which do their business for them. The New York banks, largely through private bankers, branches of foreign banking houses, connect themselves with London. So that each bank in the world is connected indirectly with every other bank in the world, and in London is the final clearing-house of the world. The clearings in New York in one day amount to from one to two hundred millions of dollars—twice as much as all the other cities in America put together. Usually once a week the banks of a city make to their clearing-house a report, based on daily balances, of their condition.

Check Collections.

Each bank in a city receives on deposit, daily, checks on other banks. Instead of sending these by messenger to the other banks they are sent to the clearing-house at a fixed hour each day—in some cities twice a day. The banks of a clearing-house city are numbered. These numbers are seen stamped upon checks which the bank handles in the process of collection. Bank A may for instance carry checks amounting to $200,000 to the clearing-house for collection. Banks C, D, E and F may have checks on A amounting to $189,240, which they send to the clearing-house for collection. This would show a balance of $10,760 in A's favor, which is paid to bank A by the clearing-house in clearing-house certificates or due bills. If the balance were against A, the amount due would have to be made up within the hour limit fixed by the

clearing-house regulations. Suppose, for illustration, that Brown of Lynn owes Smith of Media $25, and pays the amount by a check on a Lynn bank. This check will go by mail from Lynn to Media. Smith will deposit it in a Media bank. The Media bank will send it with other checks to its Philadelphia *correspondent*, say the

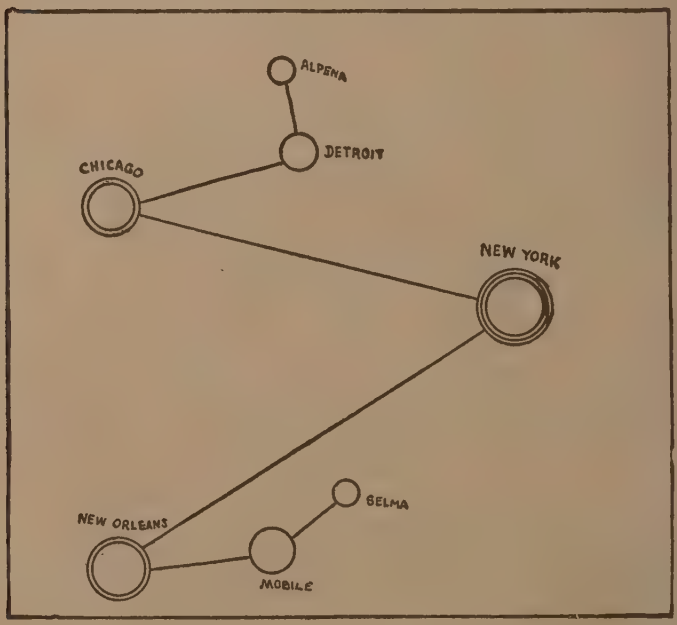


Penn National. The Penn National will send it with other checks to its New York *correspondent*, say the Chemical. The Chemical will forward it with other checks to its Boston *correspondent*, say the First National. Now the First National of Boston may not be the Boston *correspondent* of the Lynn bank. It therefore sends the check for collection through the Boston clearing-house to the bank which does the Boston business for the particular Lynn bank upon which the check is drawn, say the Second National. The Second National sends the check to Lynn, where it is charged up against Brown's account. This system of collections is almost as perfect as is the post office system of carrying registered mail.

The Wanderings of Checks.

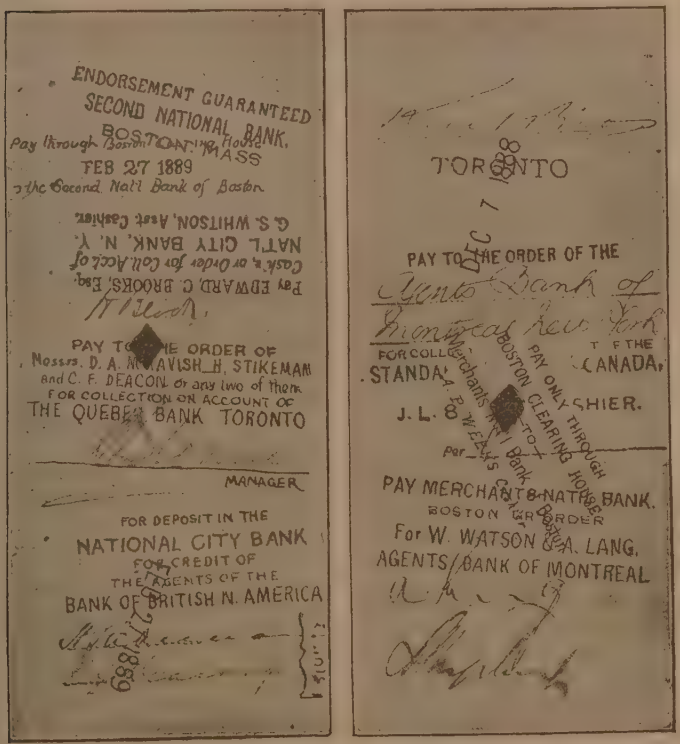
Under old-fashioned methods, each bank was in the habit of selecting its collection agents, sending them by mail their collection paper, charging their customers very substantial collection rates, and passing the same to their credit when collected. Nowadays

the country trader, no matter where he is located, sends his check on a local bank to pay his account in a distant city, and the receiver of the check expects his bank to collect the amount of



the check free of expense, and to give him full credit for it the day it is deposited. Suppose for instance that a merchant of Selma, Ala., sends his check on a Selma bank by mail to pay a bill in Alpena, Mich. The Alpena merchant deposits it in his local bank, and this local bank sends it to its Detroit *correspondent*. That is, deposits it in the Detroit bank where its account is kept. The Detroit bank sends the check to its Chicago *correspondent*. The Chicago bank may have no connection with a Southern city. It sends the check to its New York *correspondent*. The New York bank forwards the check to New Orleans, where it may pass through the clearing-house to some other New Orleans bank which forwards it to its *correspondent* in Mobile. The Mobile

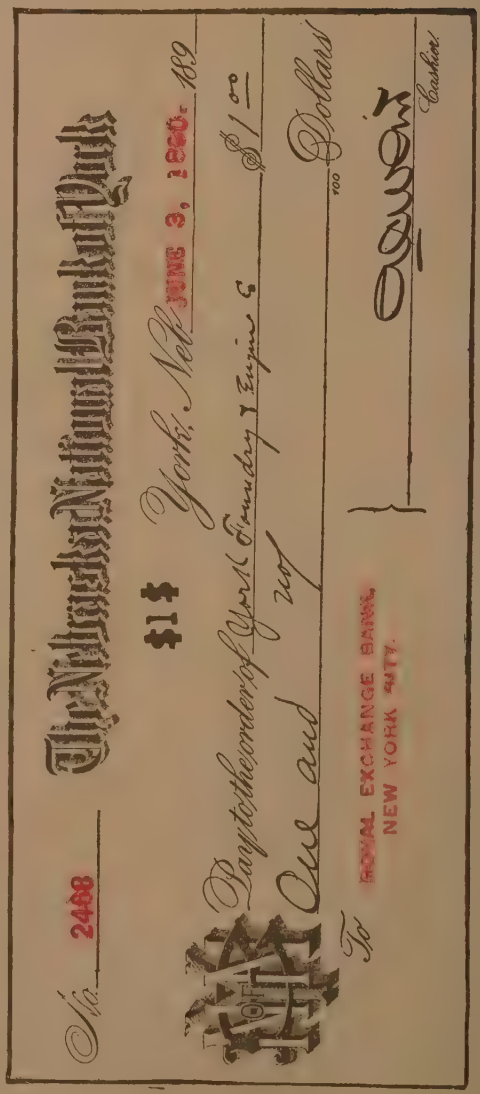
bank sends the check to Selma, and has it charged up to the account of the man who issued it. Now all these banks and clearing-houses through which the check passes, stamp their endorsement and other information on the back of the check. Our illustration shows a photo copy of the backs of two checks



which have "travelled." Millions of dollars are collected by banks daily in this way, and all without expense to their customers. It is estimated that these collections cost the New York city banks more than two million dollars a year in loss of interest while the checks are *en route*. Ten thousand collection letters are sent out every day by the banks of New York City alone

Organization of Banks.

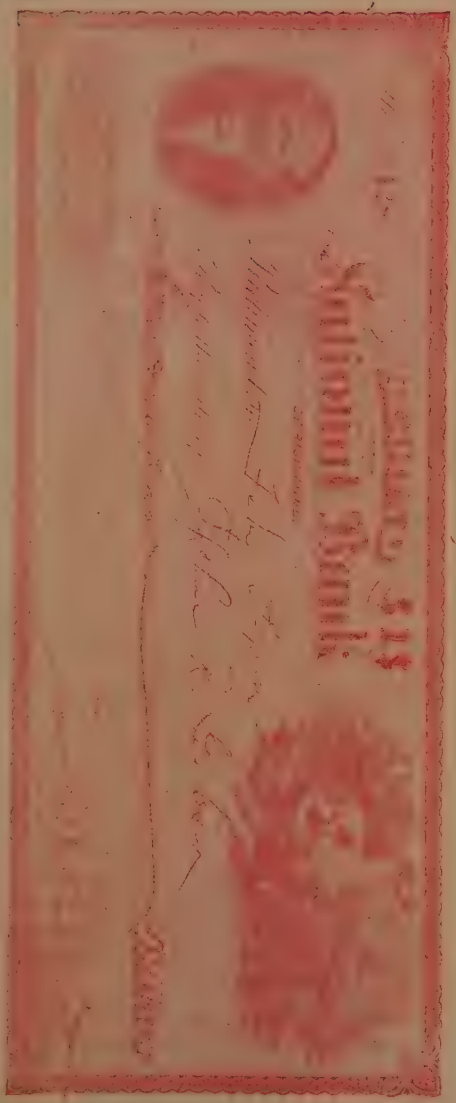
The National banks are organized under national laws, while state banks, savings banks, etc., are organized under the laws of the State in which they are located. Any person who has money and credit can start a private bank. Some of the largest banking institutions of the world are owned by private individuals, and are not subject to law any more than is any other kind of business concern. Trust companies are, in some particulars, similar to banks. They receive deposits and make loans, but they do not usually undertake the general collection of commercial paper. They act as trustees for corporations, as agents

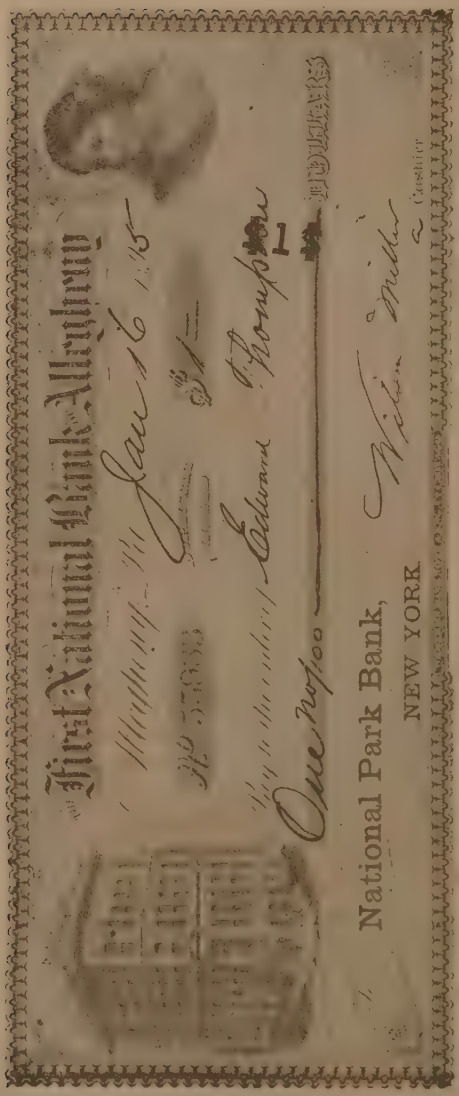

No. 2468
The Nitrogen National Bank of York
1
York, Neb. JUNE 3, 1890. 189
Pay to the order of Yours Truly or Bearer
One and 100 Dollars
To ROYAL EXCHANGE BANK, NEW YORK CITY.
Cashier

for the sale of stocks, as executors, administrators and guardians of money for courts. They make investments, collect interest and rents, and perform many other financial services.

Kiting.

Don't exchange checks to get twenty-four hours' credit. This is often done. The banks call it kiting. If your bank finds that kiting is included in your business methods, do not be surprised if you are asked to withdraw your account. Banks cannot afford to lend you money even for twenty-four hours without interest or security. To illustrate, suppose it is 12 o'clock noon—after the bank-clearing at the clearing-house. A is short and needs $500. He gives B his check for $500 and takes B's check for $500. B's check





may not be any better than A's, but A deposits it and has ample time before three o'clock to draw on the deposit and use some of the money. B may do the same with A's check. Other checks or cash are deposited in the morning before clearing-house hours so that the $500 checks may be met when they come in for collection. A may accomplish the same end by having accounts in two banks and by depositing a check on the one in the other.

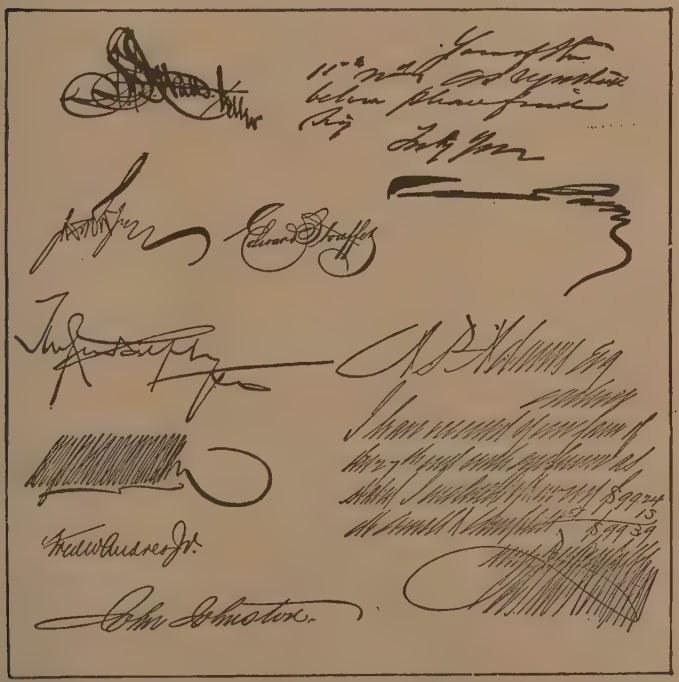
Forged Checks.

Who is liable when a forged check has been paid? This question is often asked, and the answer varies with circumstances. Ordinarily the bank must stand the loss,

but if the fraud is the result of carelessness on the part of the person whose name is forged, the bank is not liable. Business men should not only make use of the most approved methods of protecting their checks but they should take every possible precaution to prevent improper use of the blank forms by keeping them in places inaccessible to anyone but those of their own counting-rooms who are authorized to write up their checks.

Signatures.

In the course of business we often come across very queer specimens of writing and eccentricities in signatures. A New York Insurance Company's Vice-President has a signature, as it



appears on the policies issued by his company, which is fourteen inches one way and nine inches the other. In our illustration the

signature at the top on the left is that of F. S. Watte, teller of an Iowa bank. Immediately under this name is that of John Mohr, Jr., cashier of a bank in Indiana. Under Mohr's signature is that of Tom Randolph, president of a bank in Texas. Directly under Randolph's signature we find a cross-etching which represents the treasurer of a manufacturing company in Connecticut—Hugh Harbison. It ranks high as a curiosity in penmanship. The writing at the upper right-hand corner is that of Carmon Parse cashier of a bank in New Jersey. The writing in the lower right hand corner filled the entire page of a letter sheet. The name is that of Jas. V. D. Westfall. These specimens are interesting, but after all the best form of signature, and the one most difficult to forge, is that written in a plain business style, such as "John Johnston" in the illustration. Business men and bankers are as thoroughly familiar with the signatures of other business men as they are with their faces.

The Bank's Cash.

The actual usable cash of a bank is represented by the silver, gold and bills on deposit. It is estimated that the gold in use in the world amounts to $7,000,000,000, and that an equal amount has been lost through wear and other causes since the earliest times. A million dollars in gold could be put into a box two feet square and a foot deep. All the gold in the world could be put into a room 64 feet by 50 feet with a height of 20 feet. It is estimated that a million dollars worth of gold is each year buried in the cemeteries of the United States in the mouths of the dead. The gold in our banks lies piled in bags containing $5000 each. Each bag weighs twenty-two pounds. Standard gold is worth $18.96 an ounce, and a $20 gold piece weighs 21½ pennyweights. In shipping gold from New York to London it is estimated that a million dollars in gold will be reduced in value, by the coins rubbing against each other, about $175. If a standard gold coin falls short one-half of one per cent. of its original standard weight, it is marked light weight the moment it reaches the United States Treasurer. It then ceases to travel as money. The United States bills which are considered cash are of a variety of kinds. There are in circulation over $300,000,000 of treasury notes of the following denominations: $1, $2, $5, $10, $20, $50, $100, $500, $1000. These are payable in *coin*, either gold or

silver. The national bank notes are really promissory notes, issued by the banks, and payable on demand. They are secured by, and issued upon, United States bonds. Every national bank must redeem its notes in full in lawful money at the treasury in Washington or over its own counter whenever a demand for payment is made. The denominations of the national bank notes are the same as those of the treasury notes, except that there are no bills smaller than $5. The silver certificates are notes issued by the United States government and payable on demand in silver dollars. Some hundreds of millions of dollars of this form of money is now in circulation. Notwithstanding the fact that the paper used is of the very best quality, paper money, the world

over, is constantly becoming ragged and mutilated. It may be well to quote here the law which regulates the redemption of mutilated bills. If the whole face of a note is in a condition which will permit its being recognized as a genuine bill it will be paid in full. If not more than two-fifths of the paper of a national bank note is gone and the note shows the name of the bank and the signature of one of its officers, it will be paid in full. A fragment of a national bank note which does not clearly amount to two-fifths of the original paper is not redeemable at all, except a satisfactory affidavit can be presented, showing that the balance of the note has been destroyed. When a national bank note amounts to

two-fifths or more, and not over three-fifths, it is redeemed at its proportional value. The circular of the treasury department for other than national bank notes rules that one-tenth of the value of the bill is to be deducted for each tenth or fraction thereof missing, unless the note is clearly less than one-half, when it is not redeemable.

Counterfeit Notes.

All United States notes are printed in sheets of four notes of one denomination on each sheet. Each note is lettered and numbered twice. All notes of which the number when divided by 4, shows a remainder of *one*, have the check letter A; a remainder of 2, the check letter B; a remainder of 3, the check letter C; those numbers which divided by 4 show no remainder, have the check letter D. Any United States note the number of which cannot be divided by 4 and show one of the foregoing results is a *counterfeit*. There are no secrets in the art of detecting counterfeits. Careful study, long experience, and a thorough familiarity with all kinds of genuine bills, will make any person an expert. Banks are required by law to stamp as "Counterfeit" all *bad bills* coming into their possession.

Bank Loans.

A portion of the loans of many banks consists of investments in solid bonds, but the bulk of the loans of banks are made on commercial paper; time and demand loans are made upon collaterals of many descriptions. The larger banks loan, on an average, from fifty to one hundred thousand dollars a day. A very large proportion of the commercial paper discounted is first handled by note brokers. Banks *discount* paper for their depositors—and simply term the operation discounting; but when they go outside of their line of depositors, in making investments in time paper, they call it *buying* paper. They generally buy from private bankers and note brokers. National banks are prohibited from loaning over ten per cent. of their capital to any one individual or corporation, except upon paper representing actually existing merchandise.

Accurate Interest.

The treasury department at Washington pays accurate interest, founded on a basis of 365 days to the year. The great majority of banks pay and charge interest on a basis of 360 days to the year.

Money "On Call."

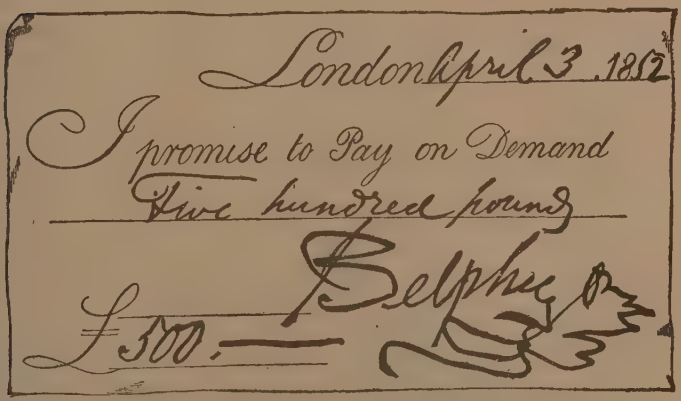
National banks located in clearing-house centers, find it a very convenient thing to put out quite a percentage of their loans *on call.* In some cities banks have a habit of borrowing on call from each other at clearing-house settlements. Call loans are payable on demand and are secured by demand notes.

Collaterals.

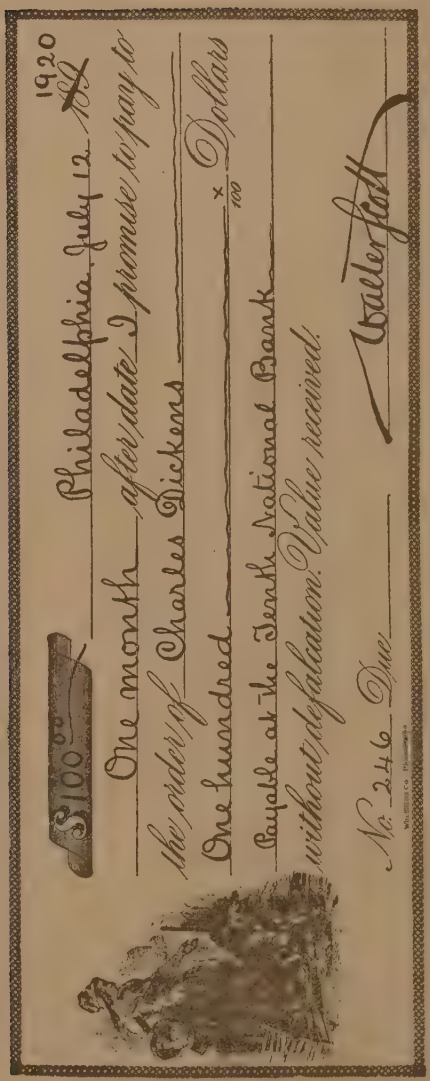
If a business man borrow $1000 from a bank on his note and give ten shares of stock to the bank to be held by it simply as security, the stock thus given would be termed *collateral.* These collaterals are not the bank's property, and the bank is responsible for their safe-keeping. If coupons mature while bonds are being held as collateral, the owners are usually allowed to collect the amount for which they sell. Sometimes one note is given as collateral security for another which is discounted.

Promissory Notes.

A promissory note is a written promise to pay a specified sum of money. At the time of the note's issue, that is, when signed and delivered, two parties are connected with it: the *maker* and



the *payee.* The maker is the person who signs or promises to pay the note, and the payee is the person to whom or to whose order the note is made payable. Negotiable in a commercial sense


$100.00
Philadelphia, July 12, 1920
One month after date I promise to pay to the order of Charles Dickens
One hundred 100 Dollars
Payable at the Tenth National Bank
without defalcation. Value received
No. 246 Due
Walter Scott

means *transferable* and a negotiable note is a note which can be transferred from one person to another. A note to be made negotiable, must contain the word *order* or the word *bearer*, that is, it must be payable either *to bearer* or *to the order* of the payee. A non-negotiable note is payable to a particular person *only*. A note may be written on any kind of paper in ink or in pencil.

Date of a Note.

The date of a note is a matter of the first importance. Some bankers and business men now consider it better to draw notes and time drafts payable at a certain fixed time; as, "*I promise to pay on the 10th of March, 1897.*" The common custom, however, is to make notes payable a certain number of days or months after date. A note made and issued on Sunday is void. The day of maturity is the day on which a note

becomes legally due. In most of the states a note is not legally due until three days, called *days of grace*, after the expiration of the time specified in the note. The words, "*without defalcation*" are inserted in Pennsylvania notes.

Value Received.

These words are not legally necessary although they usually appear on ordinary promissory notes. Thousands of good notes made without any value consideration are handled daily. The *promise to pay* of a negotiable note must be unconditional. It cannot be made to depend upon any contingency whatever. A note made payable in anything but money is simply a form of contract and is not a negotiable instrument.

Accommodation.

Notes and acceptances that are made in settlement of genuine business transactions come under the head of regular, legitimate business paper. An accommodation note, or acceptance, is one which is signed, or endorsed, or accepted, simply as an accommodation, and not in settlement of an account or in payment of an indebtedness. With banks, accommodation paper has a deservedly hard reputation. However, there are all grades and shades of accommodation paper, though it represents no actual business transaction between the parties to it, and rests upon no other foundation than that of mutual agreement. No contract is good without a consideration, but this is only true between the original parties to a note. The third party or innocent receiver, or holder of a note has a good title, and can recover its value, even though it was originally given without a valuable consideration. An innocent holder of a note which had been originally lost or stolen, has a good title to it, if he received it for value.

Interest Notes.

A note does not draw interest until after maturity, unless the words *with interest* appear on the face. Notes draw interest after maturity and until paid, at the legal rate.

Endorser of a Note.

An endorser of a note is any person who writes his name on the back of it, and by so doing guarantees its payment. Endorsements on notes are usually made in blank, that is, without the

words of "Pay to the order of." The receiver of the note is then free to endorse it or not at his pleasure if he wishes to transfer it. The endorser is liable for its payment if the maker fails to meet it. If an endorser should be compelled to pay a note he has a good claim against the maker, and against each endorser whose name appears above his own. An endorser to whose order a note is drawn or endorsed, can transfer it without becoming liable for its payment by writing the words "*without recourse*" before or after his name on the back. A person who receives a promissory note in good faith for fair value before the day of maturity, takes it free from all defects of title and from all claims that might be set up against any preceding holder. This is not true of notes transferred after maturity.

Presentation for Payment.

A note should be presented on the exact day of maturity. Notes made payable at a bank or at any other place, must be presented for payment at the place named. When no place is specified the note is payable at the maker's place of business or at his residence. The note must not be presented before or after maturity but upon the exact day of maturity if the endorsers are to be held liable for its non-payment.

Protest.

When a note is presented for payment at maturity and is not paid, it is usually *protested*, that is, a notary public makes a formal statement that the note was presented for payment and payment was refused. Notice of such protest is sent to the maker and to each endorser. The bank should never hand to its notary any paper for protest until it has made sure that its non-payment has not been brought about by some error or misunderstanding. Quite often, even though the paper has been made payable at a bank, the notary sends a messenger with the note to the maker to make a formal demand for payment. In taking in collection paper, banks should obtain clear instructions from its owners as to whether or not it should be protested in case of non-payment. It by no means follows that a formal protest is not desired because the paper bears no endorsements. Many banks make it a rule to protest all unpaid paper unless otherwise ordered.

Date of Maturity.

In finding the date of maturity it is important to remember that when a note is drawn *days after date* the actual days must be counted, and when drawn *months after date* the time is reckoned by months.

Payment on a Note.

If a payment is made to apply on a note, such payment should always be endorsed on the back of the note. Such endorsement requires no signature. The usual form is to give the date and write "Received on within note," stating the amount. An ordinary separate receipt is not sufficient. Each amount endorsed on the back reduces the face value.

A Joint Note.

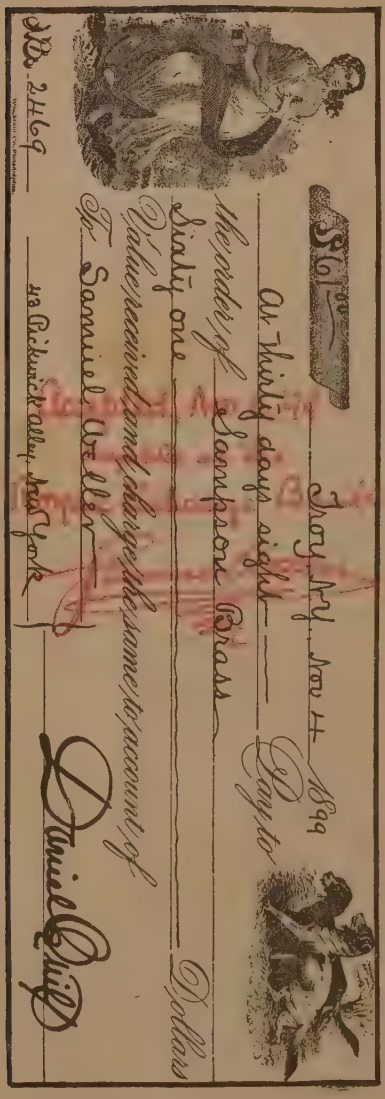
A note having two or more makers is called a *joint note.* If written "We jointly and severally promise to pay," either maker is individually liable for the whole amount if the other does not pay his share; if written, "We promise to pay," each is liable for his one-half. A note written "I promise to pay" and signed by two or more persons is a joint individual note.

Signature to a Note.

The maker's signature to a note must appear in some form upon some part of the paper. It may be affixed by himself or his authorized agent, and it may be the full name or the initials only.

Commercial Drafts.

A commercial draft is really a letter from one person to another requesting that a certain sum of money be paid to the person who calls, or to the bank or firm for whom he is acting. Commercial usages recognize a particular form in which this letter is written and the address of the person for whom it is intended is usually written at the lower left-hand corner instead of on an envelope. Commercial drafts are sent through the banks instead of directly through the mail. For instance if A of Boston owes B of New York $100, B may draw on A for the amount. He may deposit the draft in a New York bank to be forwarded or he may


No. 24469
Troy N.Y. Nov 14 1899
At thirty days sight
Pay to the order of Thompson Bros
Sixty one
Dollars
Value received and charge the same to account of
To Samuel Weller
Daniel Quilp
32 Pickwick alley, New York

mail it himself to a Boston bank for collection. When the draft reaches the Boston bank, a messenger will carry it to A. If it is a *sight draft*, that is, if B wants the money paid at sight, immediately, A may give the money to the messenger and take the draft as his receipt. If it is a *time draft*, that is, if B gives A time, a certain number of days in which to pay the draft, A *accepts* it. He does this by writing the word *accepted* with the date and his signature across the face of the draft. He then returns the draft to the messenger and it is returned to B. An accepted draft is really a promissory note, though it is often called an *acceptance*. When a man pays or accepts a draft he is said to *honor* it. In this instance A is not obliged either to pay or to accept the draft. It is not binding on him any more than a letter would be. Of course, if he refuses to honor legitimate drafts, it may injure his credit with the banks and other business houses.

Collections by Draft.

It is a very common thing to collect distant accounts by means of commercial drafts. A debtor is more likely to meet a draft than he is to reply to a letter and enclose his check. It is really more convenient and safer too, for there is some risk in sending personal checks through the mails. There are some houses that make all their payments by check, while there are others that prefer to have their creditors at a distance draw on them for the amounts due. If a business man who is accustomed to honor drafts continues for a period to dishonor them, the banks through which the drafts pass conclude that he is unable to meet his payments. Circumstances of this character have a tendency to injure one's credit. The messenger from a bank who presents a sight draft is not authorized to accept a check in payment, but the person upon whom the draft is drawn may, if he chooses, write across the face, "*Accepted, July —, 189–, payable at First National Bank*," and under this write his name. See preceding page. Such a draft is then really a check—an order on his bank to pay the amount due for him, and the particulars must be entered in the check book just the same as though an actual check had been issued. Some houses deposit their drafts for collection in their home banks, while others have a custom of sending them direct to some bank in or near the place where the debtor resides. If the place is a very small one the collection may be made through one of the express companies.

Draft Notices.

When goods are sold for distinct periods of credit and it is generally understood that maturing accounts are subject to sight drafts, there really should be no need of notifying the debtor in advance of drawing. Some houses, however, make a general custom of sending notices ten days in advance stating that drafts will be drawn if check is not received in the meantime. These notices may be often seen printed at the foot of statements sent out on the first of the month.

When are accounts due?

Custom has made some rules which are now considered absolute by the best business houses. On general monthly credit accounts, all goods bought during the month are due on the first day of the month following and may be paid any time between the first and the tenth Goods sold for cash should be paid for at once or within ten days from the date of sale. If a discount is allowed for cash that discount can

be claimed and is usually allowed if payment is made within 10 days Goods bought on March 3 at 30 days would be due April 3 plus 10 days or April 13. That is to say, if a discount were allowed for payment within 30 days the discount could be claimed if payment were not made until April 13. It is a common custom to date sales ahead, to the first of the next month, or sometimes two or three months ahead The dates then of drafts conform to the general custom of credits.

Collections through Banks.

If you desire to have your *bills receivable* and *commercial drafts* collected through a bank, you should place them with the bank at least fifteen days before maturity. About ten days before maturity the bank will send to the maker a formal notice stating that they hold a note against him, giving the amount, and date of maturity, and asking him to call and pay it. When a note is left at a bank for collection, it should be endorsed "*Collected for account of* —— ——." By this endorsement the note is not transferred to the bank. The bank is simply authorized to collect the amount.

Three Party Draft.

If the drawer of a draft owes some one in the same city with the person upon whom he draws, that is, if he has a creditor and a debtor in the same city, he can draw on the debtor in favor of the creditor and forward the draft by mail to the creditor. The creditor will deposit it for collection in the ordinary way, usually after endorsing it.

"No Protest."

We often see attached to the end of a draft a little slip with the words "*No Protest; tear this off before presenting.*" This is simply private advice to the banker informing him that the drawer does not wish to have the draft protested. It may be that he does not wish to wrong, or injure the credit of, or add to the expense of his debtor, or it may be that he considers the account doubtful and does not wish to add to his own loss that of protest fees.

Discounting Drafts.

It is quite a common thing to have drafts discounted before they are accepted. For instance a wholesale merchant may have accounts out amounting to $100,000 and he may need immediate working capital. He draws on his customers and sells his drafts to a bank either directly

or through a note broker. The amount of discount depends upon the money market. The drafts are as good as *one-name* notes. Some of them, of course, will be dishonored, but these are met by the drawer as soon as returned, or he may set aside an agreed upon percentage of the entire amount to cover the drafts likely to be returned. Drafts attached to bills of lading and other securities are frequently discounted when placed in the hands of the bank. Such drafts are usually drawn *at sight* or *at one day*.

The Advantages of Taking a Note.

It is generally understood that a debtor is more likely to pay a promissory note than he is to keep a simple verbal promise. It will injure his credit if he allows his paper to go to protest. It is difficult, too, to dispute a claim after a note has been given in settlement. The note may be used by the creditor in raising money for his own use, that is, he may get it *discounted*—sell it to a note broker or to a bank. But there are some disadvantages. If a note is accepted from a debtor the account cannot be collected until the day of maturity of the note. You may hold a note against a debtor, and if your note is not due, you cannot by any process of law prevent your debtor from selling everything he owns and leaving for *parts unknown*. A note that is overdue is in some particulars better than a note not yet matured. An overdue note draws interest at the legal rate from the date of maturity and legal steps to collect it may be taken at any moment.

Discounting Paper.

To discount a note or draft is to sell it *at a discount*. The rates of discount vary according to the security offered, or the character of the loan, or the state of the money market. For ordinary commercial paper the rates run from 4 to 8 per cent. Notes received and given by commercial houses are not usually for a longer period than four months.

Drafts and Bills of Lading.

The use made of commercial drafts in connection with bills of lading is quite interesting. For instance, the live cattle are paid for in Texas by the proceeds of a draft, with bill of lading attached, upon Chicago, where they are slaughtered. Bills of lading for the dressed beef shipped East are accompanied by drafts on New York, and the shipment per steamer to Liverpool or Glasgow is drawn against, in sterling, upon London. The latter draft is sold to a New York

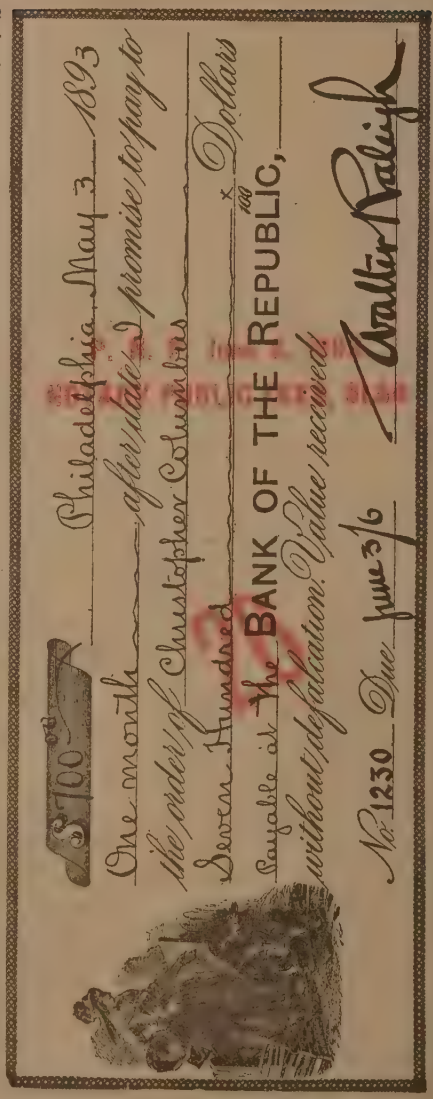
banker, who in turn draws against it in favor of merchants who are buying foreign exchanges.

Protest Notice.

The student will notice the copy of a protest notice—the form used by notaries in Massachusetts. An illustration is given also of a protested note stamped in red by the notary. The number is the clearing-house number of the bank.

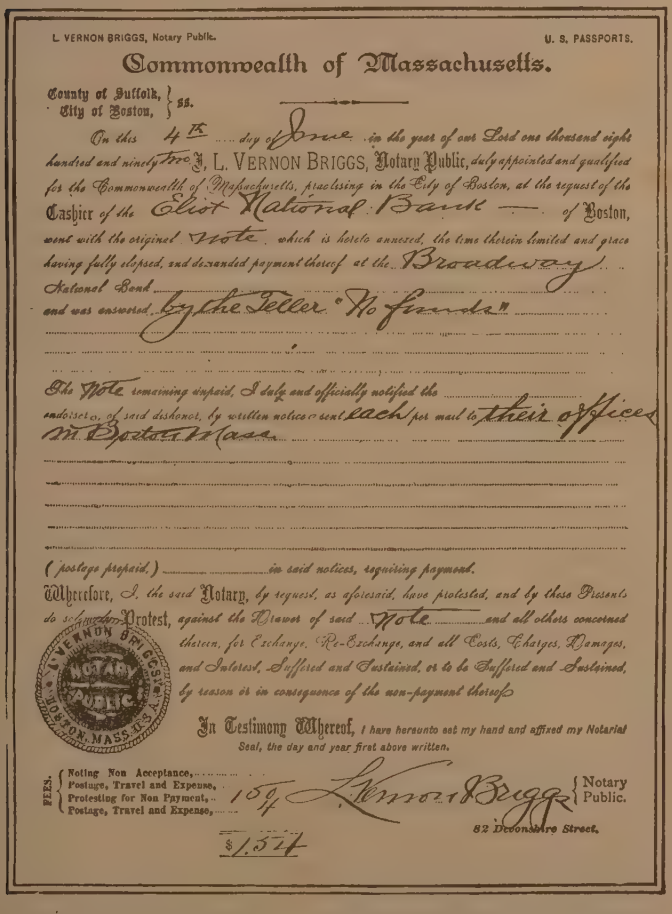
Overdue Paper.

Negotiable paper whether made for accommodation or otherwise may be transferred by endorsement and delivery or by delivery alone either before it has fallen due or afterwards. There is a difference, however, in the liability attached to endorsers, and the value of the paper may be effected by the defences existing between the original parties. It would be well to consult a lawyer before accepting overdue paper, particularly if it has endorsers.


$100
Philadelphia May 3 1893
One month after date I promise to pay to the order of Christopher Columbus
Seven Hundred 00/100 Dollars
Payable at The BANK OF THE REPUBLIC,
without defalcation. Value received.
No 1230 Due June 3/6
Walter Raleigh

Who is a bona fide holder?

If the endorsee or holder of a note has no notice at the time he receives it, of any facts or circumstances that would prevent any of the



L. VERNON BRIGGS, Notary Public. U. S. PASSPORTS.

Commonwealth of Massachusetts.

County of Suffolk, City of Boston, } ss.

On this 4th day of June in the year of our Lord one thousand eight hundred and ninety two I, L. VERNON BRIGGS, Notary Public, duly appointed and qualified for the Commonwealth of Massachusetts, practising in the City of Boston, at the request of the Cashier of the Eliot National Bank of Boston, went with the original Note which is hereto annexed, the time therein limited and grace having fully elapsed, and demanded payment thereof at the Broadway National Bank and was answered by the Teller "No funds"

The Note remaining unpaid, I duly and officially notified the endorsers of said dishonor, by written notices sent each per mail to their offices in Boston Mass.

(postage prepaid.) in said notices, requiring payment.

Wherefore, I, the said Notary, by request, as aforesaid, have protested, and by these Presents do solemnly Protest, against the Drawer of said Note and all others concerned therein, for Exchange, Re-Exchange, and all Costs, Charges, Damages, and Interest, Suffered and Sustained, or to be Suffered and Sustained, by reason of, in consequence of the non-payment thereof.

L. VERNON BRIGGS NOTARY PUBLIC BOSTON, MASS.

In Testimony Whereof, I have hereunto set my hand and affixed my Notarial Seal, the day and year first above written.

FEES. Noting Non Acceptance, Postage, Travel and Expense, Protesting for Non Payment, Postage, Travel and Expense, 1.50

L. Vernon Briggs Notary Public.

82 Devonshire Street.

$1.50

parties to the paper before him from recovering the whole amount, he is a *bona fide* or innocent holder, and if he has paid for the note, he is a holder *for value*, and can recover its full face. An *alteration* or

change in some material part of a promissory note, by a party to it, makes the paper void as regards all parties except those who assent to the change. Adding an interest rate is a change.

A Set-off.

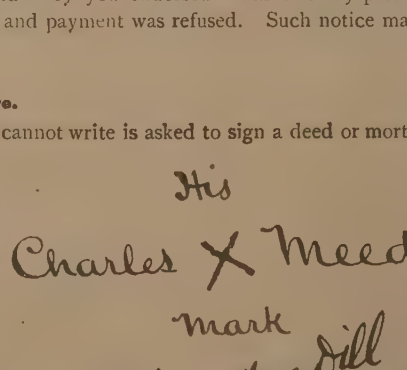
If a man has a claim against you and you have also a claim against him, you call your claim a *set-off*, that is, something to *set* or cancel off part or all of his claim. Under ordinary conditions it is impossible to have a set-off against a note not in the hands of the original payee.

Notice of Non-payment of a Note.

If the note has been discounted or is in a bank for collection, the bank will send notice to the endorsers to the effect that the note has been presented for payment and payment was refused. If the note is in the holder's hands and payment, upon presentation, has been refused, the holder should immediately send a written notice to the endorser, if any, stating that a certain note made by———, for———, in favor of ———dated———, and "by you endorsed" was this day presented to——— for payment and payment was refused. Such notice may be sent by mail.

A "Mark" Signature.

When a man who cannot write is asked to sign a deed or mortgage or other legal document, the usual custom is to have him affix a cross as in the illustration, some one doing the writing for him. Such a signature should be witnessed. See illustration. An endorsement of this kind is legal and is quite common. There are no legal rules governing the shape of the mark.



An Important Provision.

A very important provision of the national bank act is as follow

"No bank shall loan or discount on the security of shares in its own capital stock unless such security or purchase shall be necessary to prevent loss upon a debt previously contracted in good faith."

The Name "Bank."

In some of the states the title *Bank* can be lawfully used by any one; in other states, for instance, New York and Massachusetts, the title *Bank* can be used only by duly incorporated banks which are organized and conducted under the provisions and restrictions of the state banking laws.

Power of Attorney.

To give some one else the power to sign or endorse checks, notes, or other important papers, is called giving such an one *power of attorney*, that is, the power or authority to be your attorney. Such authority when given should be in writing and have a witness and should state explicitly what the *attorney* has power to do. The post-office department issues a printed blank for use by those who wish to transfer to others the power to sign money orders. Powers of this sort should be filed with the post-office, or bank interested, or should be made matters of public record at the offices of the register of deeds. The reader will find on the next page a power of attorney from Daniel Webster to Mrs. Webster giving her authority to draw and sign checks. This document appeared some time ago in *Rhodes Journal of Banking* and was taken from the files of the bank where it was actually used by Mrs. Webster.

The Return of Vouchers.

Banks usually return to promisors and acceptors, all the paper which they have collected. When you pay a note or draft you expect to receive the cancelled note or draft in exchange for the money which you pay. In the same way paid checks are returned to the drawers of them, at the end of each month. This rule is not generally followed, however, between banks and their correspondents. The cancelled note or draft which you receive should not be destroyed. It may serve as an important voucher. A good plan is to tear the signature through the middle and destroy the torn off piece. The note is then destroyed as a credit instrument but remains sufficiently complete to serve as a voucher.

Due Bills.

A due bill is an acknowledgement and evidence of a debt. It may be payable in money or in merchandise. The ordinary form of due bill is not negotiable.

Know all men by these presents that I, Daniel Webster have constituted & appointed, & do constitute & appoint, my wife S. Le R. Webster, my true & lawful attorney, in my name & stead, or in her own name, to make & draw, at all times hereafter, checks, or orders for any money standing to my credit in the State Bank in Boston; & I hereby authorize said Bank & its officers to pay all such orders & checks, in the same manner as if drawn by myself.

Witness my hand, at Boston, the 4th day of January 1847.

Witness
Peter Harvey

Daniel Webster

How Notes differ from other Contracts.

There are three peculiarities which distinguish promissory notes from ordinary written contracts. 1. Notes are negotiable. 2. There is no statement in a note of consideration. 3. There are no days of

grace allowed on ordinary contracts. A note must have a clear promise to pay, without any attached conditions. The time must be certain, that is, it must not depend upon the happening of some uncertain event.

Legal Tender.

In making money payments it is necessary often, or if the receiver demands it, to make payment in legal tender, that is, in the form of money required by law. For instance you cannot pay an account of $18 in ten-cent pieces, if the creditor refuses to accept, for the reason that silver coin of smaller denomination than one dollar are legal tender in all sums not exceeding $10.

Clearing-house Management.

The bank clerks who attend to the clearing-house business must be experts in their special work. The slightest error on the part of one clerk may prolong indefinitely the entire settlement. As a check against error very severe rules are established. The following are samples from the by-laws of a large clearing-house:

1. For disorderly conduct of any clerk, or other officer, at the clearing-house, or disregard of the manager's rules and instructions, for each offense, $4.00.

2. For any officer failing to attend punctually at the hour for making the exchanges, $4.00.

3. Debtor banks, failing to appear to pay their balances before a quarter past 12 o'clock, $3.00.

4. Any error in the credit ticket (that is the amount brought), $2.00.

5. Errors in making the balance ticket (that is, the amount received) entries $2.00.

6. Failing to deliver check tickets before half-past ten o'clock, $1.00.

7. All other errors, $2.00.

Any clerk, or other officer, who shall repeatedly and perseveringly disobey the orders or instructions of the manager, shall, with the approbation of the clearing-house committee, be expelled, and not readmitted without the written consent of the committee. Thirty minutes will be allowed for the morning business settlement, and for each additional fifteen minutes detention, $2 will be added to the fine under No. 5.

The following selections from the general rules of the same clear

ing-house will give the reader some idea of the exacting character of clearing-house regulations:

Errors in the exchanges and claims arising from the return of checks or other cause are to be adjusted directly between the banks which are parties therein, and not through the clearing-house.

Whenever checks which are not good are sent through the clearing-house they shall be returned by the banks receiving the same to the banks from which they were received as soon as it shall be found that said checks are not good; and in no case shall they be retained after one o'clock.

The manager shall immediately report to the clearing-house committee any apparent irregularity in the dealings of any bank belonging to the association that comes to his notice, and receive the instructions of the committee in regard thereto.

The committee shall have power to remove the manager or any of the clerks, whenever, in their opinion, the interests of the association shall require it.

The hour for making the exchanges at the clearing-house shall be ten o'clock A. M. each day. At a quarter past twelve o'clock, noon, the debtor banks shall pay to the manager, at the clearing-house, the balances due from them respectively either in coin or in such other currency as the laws of the United States shall require, or in such certificates as shall be authorized by the clearing-house association, excepting sums less than one thousand dollars, which may be paid in bills of the debtor bank.

At half-past one o'clock P. M. the creditor banks shall receive from the manager, at the same place the balances due to them respectively; provided all the balances due from the debtor banks shall then have been paid to him.

Should any bank fail to pay the balance due from it at the proper hour the amount of such balance shall be immediately furnished to the clearing-house by the several other banks in proportion to their respective balances against the defaulting bank resulting from the exchanges of that day.

Foreign Clearing-houses.

England has three bank clearing houses and France one. The clearing principle is used in England to adjust the complicated accounts of the through traffic of connecting railroads, and to simplify the fortnightly deliveries of stock on the London Stock Exchange. Every

clearing-house bank in London and the clearing-house itself, keep accounts with the bank of England, and differences are settled by transfers from one account to another. London originated the clearing-house. It was formed spontaneously by the clerks of the London private bankers, who, to save themselves the trouble of going about to each bank, got into the habit of meeting in a central room to settle their mutual claims. A similar practice arose among French merchants, in old times, of making their bills payable at the great annual fair in Lyons, where they met to balance their debts, and pay the differences. If gold were to be used instead of the clearing-house machinery in either New York or London, the weight to be moved every day over long distances would exceed 200 tons. The clearing-house establishes a fellowship among banks that has already proved in times of money panics, of the greatest service to themselves and the community.

Hints for Depositors.

Do not wait until you get to the bank to count your money, or to endorse your checks and arrange your deposit. This should be done before you come to the bank, or at least, before you present yourself at the receiving teller's window. Be sure that you have the figures correct. Place the bills all one way, right side up. Separate your gold and silver, and sort the silver by denominations. Do not deposit your dimes, nickels, and pennies until you have a certain amount of them, say five dollars of each; then put them in a package, with the amount and your name marked on it, and leave for the teller to count at his leisure, with the understanding that if short or over the proper correction will be made.

Borrowing from Banks.

It is the business of a bank to loan money to responsible persons, within reasonable limits. The regular customer of the bank is entitled to and will receive the first consideration if the demand is larger than the bank can safely meet. A business man should not hesitate, when occasion requires, to offer his bank any paper he may want discounted, if in his opinion it is good, nor should he be offended if his banker refuses to take it, even without giving reasons. Make your own notes and acceptances payable at your bank. Keep a careful record of the dates of maturity of all paper which you make or endorse. It is usually better, that is, more convenient to the holder, to pay your note early on the day it falls due, rather than a day or two before.

Rates for Loans.

In loaning money on demand, when it is strictly understood between bank and borrower that the money so advanced is positively minute money—money returnable at any minute, when the bank calls for it—banks usually charge low rates of interest. When interest rates are high, bankers prefer to deal in long-time paper. This general rule is reversed when the situation is reversed. Bankers aim also to scatter and locate their maturities so that as the seasons roll around, they will not have very large amounts maturing at one time and very small amounts at another. They plan also to be "in funds" at those seasons when there is always a large and profitable demand for money. For instance in the centers of the cotton manufacturing interest the banks count on a large demand for money between October and January when the bulk of the purchases to supply the mills are made; again, among those who operate and deal in wool there is an active demand for money in the wool clip in the spring months. The wheat and corn crops are autumn consumers of money. Midwinter and midsummer in the north are usually periods of comparative stagnation in the money market. All these things affect rates, and the successful banker is he who from observation and large experience shows the most skill in timing his money supply.

When Interest Accrues.

There are certain well-defined principles which make clear when interest is accruing and when it is not. Money voluntarily left by any one in the hands of another will not, of course, draw interest unless a specific mutual agreement to that effect is made. In most cases, a demand note bears interest even though there be no statement to this effect on the face of the note. Money on deposit in a bank without an agreement to pay interest will not accumulate interest even though it remain fifty years.

Forged Endorsements.

A bank is supposed to know the signatures of its depositors. It is one of its first and most important duties to have them on file and immediately accessible by the use of a well-kept signature book. Holders of checks, in very many cases, know nothing about these drawer-signatures. They have taken them, supposing, of course, that they are genuine. When they have collected the checks at the banks upon which they are drawn they are to a very great extent relieved of all

further responsibility as to the signatures of the signers, for the bank by paying them has guaranteed their genuineness. But the bank which cashes for a good holder a much-endorsed check, the signature of which is all right, generally knows nothing about its many endorsements beyond the fact that they seem to be all right and stand there in regular order, apparently correctly made. For the honesty and genuineness of these many or few preceding endorsements the last holder, for whom the check is cashed, whether he endorse the check or not, is fully and legally held, and no reasonable lapse of time before a discovery of the forgery is made will relieve him of this liability.

Trust Companies.

The ordinary trust company with which city people are familiar is very similar in its management to a national bank. They invest their deposits and capital in the same class of securities, and they are equally careful and conservative in the matter of their loans. They receive money on deposit subject to checks and allow interest on deposits which exceed a nominal sum—usually from $300 to $1,000. They are organized under and are subject to state laws. They have connection with the clearing-houses either direct or through some convenient national bank. They are in form of organization very similiar to the great joint-stock banks of England. They are usually authorized to receive and hold moneys and property in trust and on deposit from courts of law or equity, executors, administrators, assignees, guardians, trustees, corporations, and individuals, and may be appointed by probate courts trustees under any will, upon such terms and conditions as may be agreed upon. They act as trustees for widows or children, take charge of and manage property, and collect interest and rent. They act as transfer agents for railroad and other stock, and as agents for the purpose of issuing, registering, or countersigning the certificates of stock, bonds, or other evidences of debt, and for the payment of dividends. They act as agents or attorneys for the care and management of invested property.

Safe Deposit Vaults.

Many of the banks, trust companies, and insurance companies make a special feature of renting small safe deposit boxes or drawers in their vaults to any and every person who chooses to pay the rent asked, which depends largely on the amount of space needed and is usually $10 for the smallest sized box. It is very convenient for one who has not a safe of his own to have a secure place in which to keep valuable

papers. In many of the larger safe deposit vaults there are desks and stationery for customers so that one may at any time and very conveniently and privately examine one's papers and make entries or endorsements, or add new vouchers, or make changes, as the occasion may require.

A Depositor's Credit.

As a rule, banks do not make known even to a single individual the extent of a customer's business or the size of his bank account. However any shareholder in a bank has a right, as one of the proprietors, to examine the books, so long as such examination is not an unreasonable interference with the regular routine of work, and it is pretty generally known that a large depositor can either directly or through some other bank get at the condition of a small depositor's account.

Giving Bonds for Faithful Service.

Bank clerks and officers are usually required to give bonds, that is, they must get some person to go their suretyship, thus guaranteeing faithful service, and agreeing to make good any losses caused by defalcation or carelessness. There are now several surety companies that give bonds for everyone and anyone whom they consider a "good risk" upon the payment of certain premiums as in insurance. If a young man is an applicant say for a cashier's position in a mercantile house and the house requires that some one give a bond, that is, go his surety for $10,000, and the young man has no rich father or uncle to guarantee the house against loss, he applies to a bond insurance company and if his record and habits are good he has no difficulty in securing the necessary papers. The amount of the bond required depends upon the importance of the position applied for. Presidents of banks do not usually give bonds. The bonds of personal friends have always a good deal of moral weight and force and for this reason are considered superior to the bonds granted by a guarantee company Such a bond is really a testimonial, and the last one that is likely to be violated. The record shows that marvelously few employees have violated such bonds. The guarantee companies look into a man's standing very thoroughly before taking the risk of becoming his surety. When an application is made three references are given and the company corresponds with the persons whose names are given as references and asks a great many very pointed questions. A young man with good social standing can secure bonds for five or ten thousand dollars by the payment of a small annual premium.

Know all Men by these Presents,

That we,.....*Henry Brown*.....as principal, and .....*James Carr*.....*and Henry Johnson*.....as sureties, are holden and stand firmly bound unto

The Royal Exchange Bank, of New York,

in the sum of.....*Ten Thousand* .....dollars to be paid unto the said.....*Royal Exchange Bank* .....

Whereas, the said .....*Henry Brown*.....has been duly appointed to the office of.....*Cashier*.....of the bank aforesaid, by the Directors thereof, and has signified his acceptance of the said appointment:

Now the condition of this Obligation is such, That if the said.....*Henry Brown*.....shall faithfully discharge the duties of his said office and all other duties that are, or may hereafter be, prescribed by the President and Directors, for and during the term for which he has been so elected, and for and during such term of time as he may continue therein, by any re-election or otherwise, then this obligation shall be void, but otherwise shall remain in full force.

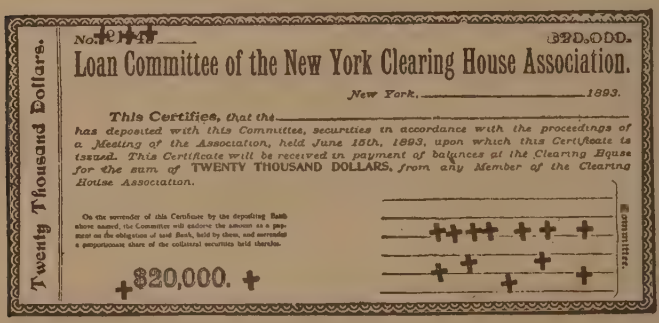
It is, however, understood, that in case of the death of either of the above-named sureties, or in case either of the above-named sureties shall at any time give notice in writing, to the President or Directors, for the time being that he does not wish to be held any longer responsible on this obligation, thereupon both of the above-named sureties shall be discharged from liability on account of any default of the said principal which may occur after thirty days from and after the notice of such death, or of such wish to be discharged as aforesaid.

Signed and sealed in the presence of

Witnesses:	*Chas. Wood.*	*Henry Brown*..(SEAL.)
	William Greene.	*James Carr*.....(SEAL.)
	B. S. Rover.	*Henry Johnson*(SEAL.)

Use of Instruments of Credit.

All the wholesale transactions and a large part of the retail transactions are completed by the passing of instruments of credit—negotiable titles: notes, drafts, checks, etc.; a part of the retail trade only is conducted by what is called cash, that is, actual bills and small change. It is the function of banks to deal with these transferable titles. Banks deal to a very small extent in actual money. The notes,


Twenty Thousand Dollars.

No. [illegible] $20,000.00.

Loan Committee of the New York Clearing House Association.

New York, _____ 1893.

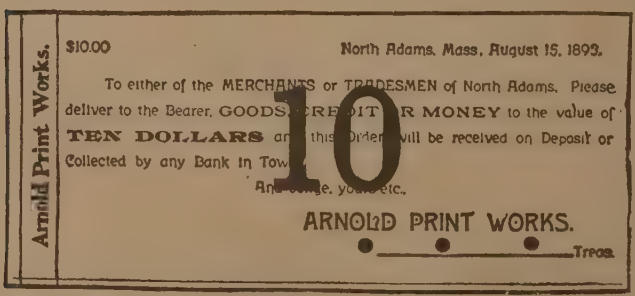
This Certifies, that the _____ has deposited with this Committee, securities in accordance with the proceedings of a Meeting of the Association, held June 15th, 1893, upon which this Certificate is issued. This Certificate will be received in payment of balances at the Clearing House for the sum of TWENTY THOUSAND DOLLARS, from any Member of the Clearing House Association.

On the surrender of this Certificate by the depositing Bank above named, the Committee will endorse the amount as a payment on the obligation of said Bank, held by them, and surrender a proportionate share of the collateral securities held therefor.

$20,000.

Committee.

drafts, bills of exchange and bank deposits are representative of the property passing by title in money from the producers to the consumers. A small proportion, perhaps six or eight per cent., of these transactions, is conducted by the use of actual bank or legal tender notes. This


Arnold Print Works.

$10.00 North Adams, Mass, August 15, 1893.

To either of the MERCHANTS or TRADESMEN of North Adams. Please deliver to the Bearer, GOODS, CREDIT OR MONEY to the value of TEN DOLLARS and this Order will be received on Deposit or Collected by any Bank in Town and Change, etc.

10

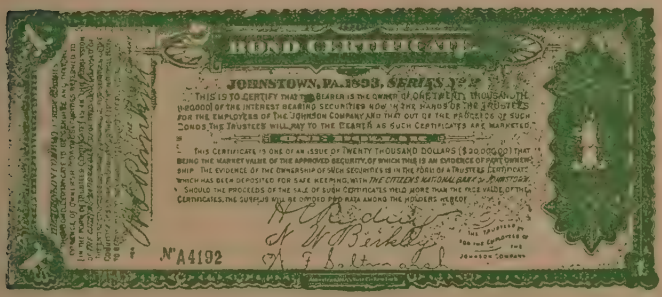
ARNOLD PRINT WORKS.

Treas.

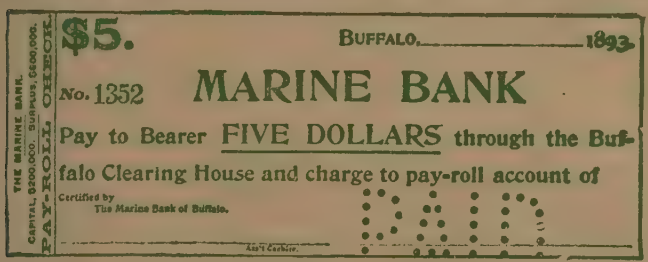
trade in instruments of credit amounts to nearly fifty billions of dollars yearly. The losses through mercantile failures rarely exceed one hundred millions a year, that is one dollar in every five hundred, or one-fifth of one per cent. of the gross amount of business.

Emergency Currency.

Some samples are given here of the emergency currency of 1893.


BOND CERTIFICATE
JOHNSTOWN, PA. 1893. SERIES No. 2
THIS IS TO CERTIFY THAT THE BEARER IS THE OWNER OF ONE HUNDRED THOUSANDTH
PART OF THE INTEREST BEARING SECURITIES NOW IN THE HANDS OF THE TRUSTEES
FOR THE EMPLOYEES OF THE JOHNSTON COMPANY AND THAT OUT OF THE PROCEEDS OF SUCH
BONDS THE TRUSTEES WILL PAY TO THE BEARER AS SUCH CERTIFICATES ARE MARKETED
ONE DOLLAR
THIS CERTIFICATE IS ONE OF AN ISSUE OF TWENTY THOUSAND DOLLARS ($20,000.00) THAT
BEING THE MARKET VALUE OF THE APPROVED SECURITY, OF WHICH THIS IS AN EVIDENCE OF PART OWNERSHIP
THE EVIDENCE OF THE OWNERSHIP OF SUCH SECURITIES IS IN THE FORM OF A TRUSTEES CERTIFICATE
WHICH HAS BEEN DEPOSITED FOR SAFE KEEPING WITH THE CITIZENS NATIONAL BANK OF JOHNSTOWN
SHOULD THE PROCEEDS OF THE SALE OF SUCH CERTIFICATES YIELD MORE THAN THE FACE VALUE OF THE
CERTIFICATES, THE SURPLUS WILL BE DIVIDED PRO RATA AMONG THE HOLDERS THEREOF
No A4192
TRUSTEES OF THE EMPLOYEES OF THE JOHNSTON COMPANY

Beginning in August and within a single month a currency famine due to a variety of causes became general. The banks ceased to loan

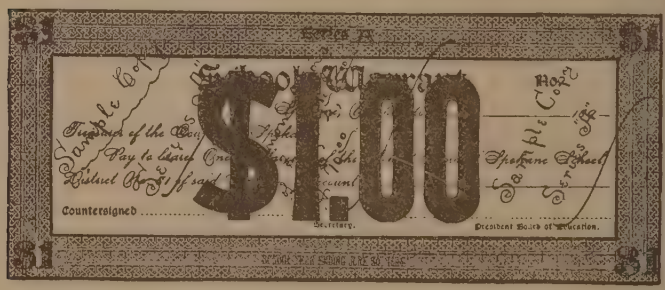


money, many of them fearing "a run." Interest reached 20, 50, and 100 per cent. The banks of one city refused to accept drafts on an

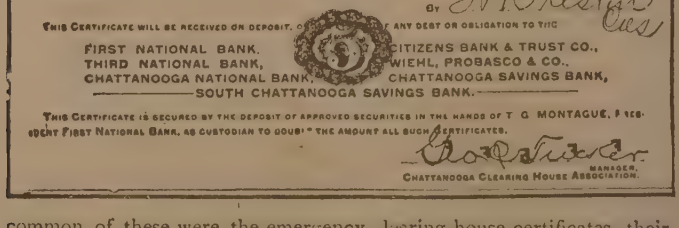
CITY OF RICHMOND 6 PER CENT BOND
TWELVE MONTHS AFTER DATE
THE City of Richmond, STATE OF VIRGINIA
TEN DOLLARS
ISSUED UNDER THE ORDINANCE OF COUNCIL APPROVED AUGUST 21ST 1893

other. Some hundreds of banks were compelled to close their doors. The country had been doing ninety per cent. of its business upon credit

instruments—not actual money, and when these instruments were refused a financial panic was the result. Men preferred currency in hand to the best kind of credit account, and as a result the actual money was locked up in private vaults. Currency became so scarce that it had to be bought as merchandise at a heavy premium. Merchants were forced to send by express the actual bills to meet distant accounts and to pay



the expenses of their families at the summer resorts. Checks were useless away from the banks upon which they were drawn. More than $300,000,000 was withdrawn from the banks and hoarded by the owners. This situation brought into local circulation several forms of currency—credit instruments—which were decidedly unique. The most


THIS IS TO CERTIFY, That there has been deposited in this Bank FIVE DOLLARS, payable to the bearer of this Certificate, in current funds FOUR MONTHS from date.

Chattanooga, Tenn. Aug. 19, 1893. SOUTH CHATTANOOGA SAVINGS BANK.

By

This Certificate will be received on deposit, or [illegible] any debt or obligation to the

FIRST NATIONAL BANK, CITIZENS BANK & TRUST CO.,
THIRD NATIONAL BANK, WIEHL, PROBASCO & CO.,
CHATTANOOGA NATIONAL BANK, CHATTANOOGA SAVINGS BANK,
SOUTH CHATTANOOGA SAVINGS BANK.

This Certificate is secured by the deposit of approved securities in the hands of T. C. Montague, President First National Bank, as custodian to double the amount all such certificates.

Manager,
Chattanooga Clearing House Association.

common of these were the emergency clearing house certificates, their object being to extend indefinitely the brief term of mutual credit involved in all clearing-house settlements. They were in reality not used as currency, but their effect was to add their face value to the volume of currency in circulation, by releasing, for use outside, that which would otherwise have been reserved for clearing-house settlements. In

each instance the use of the certificates was limited strictly to settlement of mutual accounts between members of the particular clearing-house association issuing the certificate. The certificates were issued to banks upon securities which they furnished. Note the reading on the New York certificate, an illustration of which is given. Other devices of similar character were clearing-house due bills. These stated that a certain sum was due by a particular bank to some other bank or to the order of some individual, and usually had the following additional wording: *This due bill is only good when signed by one and countersigned by another authorized person, and is payable only in the exchanges through the clearing-house the day after issue.* Another expedient favored in all parts of the country, was the sale by banks of certified checks against themselves for currency denominations, which when signed by the purchaser, were used by him as currency. Most generally used of all, however, were pay checks in currency denominations, which in scores of manufacturing towns, were the only currency that was available for weekly payments and cash purchases by wage-earners. In addition to these well defined classes, there were others so varied that but a suggestion of them can be made—negotiable certificates of deposit; ninety-day and other short time paper in currency denominations; bond certificates; grain purchase notes; credit and corporation store orders; improvement fund orders; teachers' warrants; shingle scrip, etc. In every case where the associated banks of a section failed to supply the needed currency, individuals and corporations were compelled to resort to extraordinary devices. This illegal bank-note currency was accepted by the community, the financial conditions became normal again, and every credit instrument was made good in actual money.

Defalcations and Embezzlements.

An experienced banker offers the following suggestions to prevent defalcations and embezzlements through the manipulating of the bank's record books: Secure clerks of high character and integrity and have a proper system of accounts with a perfect system of checking everything. If possible keep accounts in duplicate. The balance ledger can be proved to a cent every day, and this should certainly be done. When practicable, it is better to have all differences investigated, and reported upon by some one who is not directly responsible. A number of banks in the large cities have created the position of auditor of accounts, and it is one of his duties to report to the cashier direct upon

all differences. This auditor reconciles accounts-current with out-of-town correspondents, balances and delivers all pass-books, and furnishes information to all depositors respecting their accounts. A great benefit is secured to a bank by the examination of one man's work by another. Pass-books of active accounts should be written up once a month, and no pass-book should run longer than two months before being balanced. It should be a rule in every bank that no charge entry should be put through the books, except from a proper voucher, that is, a check signed by a depositor, or a charge ticket made out and signed by an officer of the bank. The discount clerk and the collection clerk should not be the same person, and neither of them should be the corresponding clerk. The monthly accounts-current rendered by a city correspondent should be reported upon promptly, and any disposition on the part of the bookkeeper to delay or neglect this matter should be corrected. A very important requisite in modern banking is a system of thorough examination at irregular intervals. No teller, bookkeeper, or other clerk can suffer the slightest harm from having his cash and books examined and found correct. All notes held for collection should be accounted for, and balances due from other banks for collections, should be verified. Special deposits of securities held for safe-keeping should be examined occasionally. The more complex the bookkeeping the easier it is to "cook" the accounts.

A rare Bank Note.

The photo-copy of the $2-note here given is a good sample of the old style state bank notes in circulation sixty or seventy years ago. The note reproduced here is the property of Mr. John A. Kennedy, cashier of the Niagara Bank of Buffalo. He considers it worth $1,000.

Foreign and Domestic Commercial Credit.

It is to credit alone that we are indebted for that intermediate agent which plays so important a part in the transaction of business, whether it be in causing supply and demand to meet, or in applying to the industry of exchange the principle of the division of labor which is so favorable to production. Without credit this intermediary is impossible in most instances. It gives birth to both industry and trade. It multiplies the producing and consuming power of society; by facilitating exchange it accelerates and increases it. In reality the largest share of the business of the world is done on a credit basis. In many instances the instruments of payment which we call cash are in reality

only promises to pay. During the Middle Ages credit transactions of great importance and on long time were effected without leaving the slightest trace in writing; and even to this day the Russian producers and merchants who frequent the great fair at Nijni Novgorod, contract credit obligations for twelve months' time, without giving the least evidence of the debt, and that for a very good reason: very frequently they can neither read nor write. When we give credit we give value and wait for the value we are to receive in return; but we often cannot afford to do this, so we get some other person to wait for us by giving him an instrument of credit which we take when we deliver our goods. This person to whom we give the instrument of credit may not be able to wait either, so he takes the paper to the bank and discounts it. It is the business of the bank to wait, not the business

of the merchant. The latter should keep his full capital active every day and every dollar he is waiting for is inactive and is earning nothing. On the hand the bank increases its capital by waiting for the simple reason that it charges for waiting just as a lawyer charges for giving his time to his client. But does this increased circulation increase capital? The machine runs faster and turns out more work but doesn't increase its size or its intrinsic value; it is the work that counts, not the machine

History of Financial Exchange.

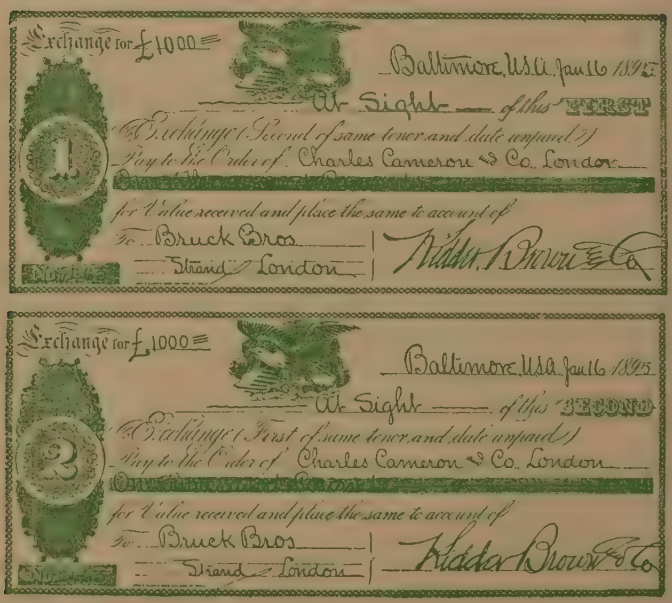
In early times foreign trade consisted in the direct exchange of commodities. A caravan set out with a variety of manufactured articles, across the deserts of Arabia or Sahara and came back with the ivory, spices, and other valuable raw products obtained by barter. In later times the merchant loaded his own ship and sent her forth on an adventure, trusting that his shipmaster would sell the cargo to advantage, and, with the proceeds, bring back another cargo to be sold to great profit at home. Trade was thus reciprocal, and what was sent out paid for what was brought back. Wherever this direct reciprocal exchange did not exist it was necessary to devise some mode of transferring debts. To the early Italian and Jewish merchants we owe the development of the use of the credit instruments which have since developed into bills of exchange. As early as the fourteenth century bills were used under similar customs and of about the same form as those of the present day.

Principles of Exchange.

In commerce the term *exchange* is generally used to designate that species of mercantile transactions by which the debts of individuals residing at a distance from their creditors are cancelled without the transmission of money. Among cities or countries having any considerable intercourse together, the debts mutually due by each other approach, for the most part, near to an equality. There are at all times, for example, a number of persons in New York indebted to London, and perhaps, as many persons in London indebted to New York. Hence when A of New York wishes to make a payment to B of London, he does not send the actual money, but he goes into the market and buys a *bill of exchange* on London, that is, he goes to a New York bank, doing a foreign business, such as Brown Bros., or Drexel, Morgan & Co., and buys a draft, called a bill of exchange, which is in reality the New York banker's order on his London *correspondent* ask

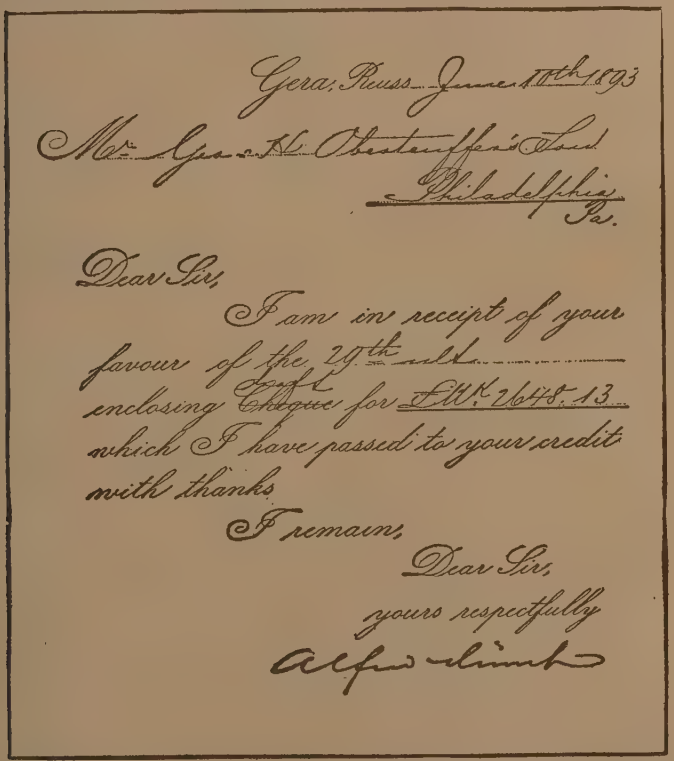
ing the latter to pay the money to the person named. It may be that about the same time some London merchant who owes money in New York goes to the very same London banker and buys a draft on the New York bank. In this way the one draft cancels the other, and when there is a difference at the end of a week or month the actual gold is sent across to balance the account. Inland or domestic bills are commonly called drafts. Foreign bills, that is, bills on foreign countries are called *exchange*. The *par* of the currency of any two countries means among merchants, the equivalency of a certain amount of the currency of the one in the currency of the other, supposing the currencies of both to be of the precise weight and purity fixed by their respective mints. Thus according to the mint regulations of Great Britain and France, £1 sterling is equal to 25.2 fr., which is said to be the par between London and Paris. And the exchange between the two countries is said to be at par when bills are bought or sold at this rate; that is, for example, when a bill for £100 drawn in London is worth 2520 francs in Paris, and conversely. When £1 in London buys more than 25.2 fr., exchange is said to be in favor of London. The par of exchange between Great Britain and the United States is 4.86⅔, that is, a £1 sterling is worth $4.86⅔. Exchange is quoted daily in New York and other city papers at 4.87, or 4.87½, etc., for sight bills and at a slightly lower rate for sixty day bills. These are the two common kinds of bills usually bought. The sixty day bills bought in New York are as good as cash when they reach London but they are cashed at a discount from their face value, unless they are held until the date of maturity. The foregoing statements explain in a general way the meaning of the par of exchange, but its exact determination, or the ascertaining of the precise equivalency of a certain amount of the currency of one country in the currency of another is exceedingly difficult. If the standard of one be gold and that of another silver, the par must necessarily vary with every variation in the relative values of these metals. The value of the precious metals even in contiguous countries, is always exposed to fluctuations from the overissue or withdrawal of paper, from circumstances affecting the balance of payments. Gold is usually high when there is a demand for gold or a scarcity of it just as in the case of potatoes or wheat. It is obvious, therefore, that it is all but impossible to say, by merely looking at the mint regulations of any two or more countries, and the prices of bullion in each, what is the par of exchange between them. The imports and exports of bullion is the real test of exchange. If bullion is stationary,

neither flowing into nor out of a country, its exchanges may be truly said to be at par; and, on the other hand, if bullion is being exported from a country, it is a proof that the exchange is against it, and conversely if there be large importations. Variations in the actual course of exchange, or in the price of bills, arising from circumstances effecting the currency of two countries trading together, are *nominal* only: such as are *real* grow out of circumstances effecting their trade. When each buys of the other commodities of precisely the same value, their debts and credits will be equal, and the real exchange will be at par.


Exchange for £1000
Baltimore, U.S.A. Jan 16 1895
At Sight of this FIRST
(Exchange (Second of same tenor and date unpaid)
Pay to the Order of Charles Cameron & Co. London
for Value received and place the same to account of
To Bruce Bros
Strand London
Exchange for £1000
Baltimore, U.S.A. Jan 16 1895
At Sight of this SECOND
(Exchange (First of same tenor and date unpaid)
Pay to the Order of Charles Cameron & Co. London
for Value received and place the same to account of
To Bruce Bros
Strand London

This condition of affairs very rarely happens. The cost of conveying bullion from one country to another forms the limit within which the rise and fall of the *real* exchange between them must be confined. If a New York merchant owes a debt in London and exchange costs him, say 2 per cent. and the cost of shipping the gold is only 1 per cent. it will be to his advantage to pay the debt by sending the actual coin across, so that the limit within which trade fluctuations may range corresponds to the actual cost of making remittances in cash. Fluctua-

tions in the nominal exchange, that is, in the value of the *currencies* of countries trading together, have no real effect on foreign trade. When the currency is depreciated, the premium which the exporter of commodities derives from the sale of the bill drawn on his correspondent abroad is only equivalent to the increase in the price of the goods exported, occasioned by this depreciation. A favorable *real* exchange


Gera, Reuss June 10th 1893

Mr. Geo. H. Obesterffer's Sons

Philadelphia

Pa.

Dear Sirs,

I am in receipt of your favour of the 29th ult. enclosing Cheque for £W.K. 2648.13. which I have passed to your credit with thanks.

I remain,

Dear Sirs,

yours respectfully

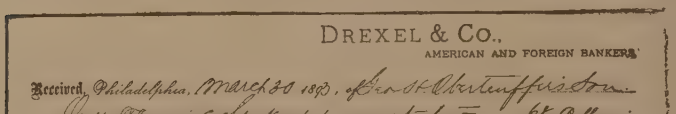
Alfred Limb

operates as a duty on exportation, and as a bounty on importation. It is to the interest of merchants or bankers who deal in foreign bills to buy them where they are the cheapest, and to sell them where they are the dearest. For this reason it might often be an advantage for a New York merchant to buy a bill on London to pay a debt in Paris, or to buy a bill on Paris to pay a debt in Berlin. For instance, in the trade

between England and Italy the bills drawn on England amount almost invariably to a greater sum than those drawn on Italy. The bill-merchants, however, by buying up the excess of the Italian bills on London, and selling them in France and other countries indebted to England, prevent the *real* exchange from ever becoming very much depressed.

Changes in Exchange Rates.

Exchange is not effected so much by the balance of trade as by the balance of indebtedness. Europe can contract debts in America by the purchase of stocks, bonds, or other securities as readily as by the purchase of wheat, cotton, or oil, the rate of foreign exchange being similarly affected no matter what is bought. European owners of American securities when sending them to America obtain the right to


DREXEL & Co.,
AMERICAN AND FOREIGN BANKERS.

Received, Philadelphia, MARCH 30 1893, of Geo. H. Chetwynd Esq.
One Thousand eight Hundred ninety two 68/100 Dollars, in payment for Cable Transfer £387 7s. 6d. sold by me through Messrs J. Morgan & Co. London free of all risks to us arising from any error or delay in transmission on the part of the Telegraph Companies

£387 7s. 6d. @ 4.85 1/4 $1892.68
paid 1.96

draw against the American receivers of those securities. One hundred shares of stock sent by a London firm to a New York firm, will make as much exchange against New York as the same value in wheat shipped by a New York firm to a Liverpool account; so that the balance of trade, so far as imports and exports are concerned, may appear favorable and yet no balance of indebtedness appear. The movement of merchandise is recorded while the movement of securities is not recorded. The sum total of our securities in European hands is unknown, but it probably exceeds our national debt. The rate of foreign exchange, affected by trade movements and by the movements of securities, is also affected by interest and dividend payments and by remittances for freight on importations of merchandise, the owners of vessels usually being foreigners. Our large cities send annually to Europe drafts for hundreds of thousands of dollars to cover interest on

city bonds. Foreign exchange is affected too, by the difference which exists at any time between the American and European market rate of interest. If money can be loaned at 10 per cent. in New York while only 3 per cent. can be obtained in London, there is an advantage in keeping or sending money here, the difference in interest being greater than the cost of transportation. The fact of ours being a gold producing country is also important, for it indicates that a small annual export of gold is to be expected. There is another factor which has a noticeable effect, namely that of travel. Thousands of wealthy Americans travel abroad every summer and the letters of credit which they carry, if not counterbalanced by some other cause, require gold shipments to meet them. Ordinarily when the market rate of demand exceeds 4.867 it is evident that foreign goods have been imported too freely, or American goods are not wanted abroad, or American securities find a better market here than in Europe, or rates of interest here are too low to attract or keep foreign money, or foreigners are short of money, or there are great numbers of Americans abroad, or we have produced a surplus of gold, or freight remittances are large, or interest payments on securities owned abroad are heavy. And when the market rate is below 4.867, the reverse is true. Of course there are other causes, and important ones too, but those named are the principal causes of changes in rates under normal trade conditions. Eastern capital is extensively used in the West, because the people of the West can make a profit by its use in excess of the interest and dividends sent to its owners. For the very same reason, European capital is extensively used in the United States.

Domestic Exchange.

The principle of domestic or local exchanges is precisely the same as that described as underlying the foreign exchange business. In foreign exchange we have to do with a mixture of dollars with sovereigns or other foreign money. In domestic exchange we have dollars at both ends of the line. Suppose A of New York owes B of Chicago $12,000. He buys a draft (check) on Chicago for this sum and mails it to B. Now this draft will cost him something in addition to its face, but it should not cost more than $12 exchange, for the reason that A can take his $12,000 in bills or gold and express it to Chicago for $12. If $12 were charged the rate of exchange would be $\frac{1}{10}$ of one per cent. But suppose that at the same time C of Chicago has $8,000 to send to D of New York and is trying to buy a draft in Chicago. If C keeps his

money or turns it over to B, or to B's bank, or for that matter to any bank, A need not ship more than $4,000, for the balance can be turned over to D in New York, or to D's bank, or to any bank. Now $4,000 can be shipped for $4, so that the rate of exchange on a draft for $12,000, only $4,000 of which need be shipped, should not be more than $\frac{1}{300}$ of one per cent. Under normal conditions exchange should be based upon the cost of shipping the balances due rather than the gross amounts due. If Chicago is buying more through New York than New York is buying through Chicago, it will be necessary at regular intervals to ship gold or bills from Chicago to New York to meet the differences, and when this is the trade condition, drafts on New York if purchased in Chicago will be at a premium. Drafts bought in New York on Chicago should be at a discount, but as a matter of fact, they will be at par. There are, of course, many other things which affect exchanges. Our banking system is such that the condition of the money market is uniform in each banking center but these centers may differ very largely from each other, and while in Boston the banks might have more money than they could use, the banks of St. Louis or St. Paul might be unable to meet the demand upon them.

The Cost of Shipping Gold.

There are times when it is to the advantage of the banker or merchant to ship gold to meet foreign debts. Usually if sight bills on England cost more than 4.90 it is cheaper to ship gold. The following figures give some particulars of the cost of such shipments: *Freight*—⅛ of one per cent. *Insurance*—⅛ of one per cent. *Abrasion*—From nothing to ⅛ of one per cent. on $20-pieces; ⅛ per cent. to ¼ per cent. on $10-pieces, and ¼ per cent. to ½ per cent. on $5-pieces. The cost of bringing gold from London to New York is the same as the cost from New York to London. The actual demand for gold in either city will affect its value slightly, and this temporary value must be ascertained before making close figures on a large transaction.

The World's Financial Center.

There is no doubt of the fact that London is the financial center of the world. This tendency to the centralization of financial business in London is much promoted by the fact that the largest mass of cheap loanable capital exists there. The general rate of interest in New York is at least 3 per cent. higher than in London, so that a trader who has credit enough to obtain loans in London, will make a profit by borrow-

ing there rather than in New York city. The great banks of the world each of which is a center for its own section of country must have a general center for clearings and London has grown to be this center. The great foreign trade of England, her thousands of carring ships, her merchants and investments in every country on the globe, the age and strength of her great financial institutions, and the many distant colonies and dependencies which naturally have financial relations with the capital of the empire, tend to give London the unique position which is rightfully hers. Lombard and Threadneedle streets are the great money streets of London, as Wall street is of New York.

The World's Currencies.

In addition to the gold and silver coins, the *United States* has in circulation about $350,000,000 in "greenbacks"—the remnant of the forced paper currency of the civil war; about $155,000,000 in treasury notes issued in payment for silver bullion; gold certificates in denominations of not less than $20, issued upon deposits of gold; silver certificates issued against standard silver dollars deposited in the treasury; currency certificates issued in denominations of not less than $5,000 upon the deposit with the treasury, by national banks, of United States legal tender notes; national bank notes of denominations of $5 and upwards, issued by banks upon the deposit with the treasury of United States bonds which are held as security for the ultimate redemption of the notes. The currency of *Great Britain* in actual circulation includes the gold sovereign (value $4.8665) and half-sovereign; the silver crown (value $1.087), half-crown, shilling (value $0.217), six-pence, four-pence, and three-pence. The paper money includes the notes of the Bank of England the smallest denomination of which is £5, the notes of the Scotch and Irish banks, the smallest denomination of which is £1, and the notes of the joint stock and private banks. The currency of *Canada* is in form, at least, similar to that of the United States. Canada has no gold coinage of her own. The gold coins of the United States and Great Britain pass current and are legal tender. The silver coins are similar to those of the United States except that there is no silver dollar, and a silver five-cent piece. The notes issued under the authority of the Dominion are of the denominations $1, $2 and $4, and are redeemable on demand in gold. Bank notes are issued by the chartered banks in denominations not smaller than $5. No special security in the way of deposit of bonds is required, but the notes in case of insolvency are a preferred claim against all the

assets of the bank, including the double liability of the stock holders. The aggregate issue rarely exceeds sixty per cent. of the paid-up capital of the bank and must not exceed one hundred per cent. The monetary system of *Australia* is the same as that of Great Britain. *British India* has a silver standard unit, the rupee (value $0.444). There are gold coins in value equal to five, ten, fifteen, and twenty rupees respectively. The government issues notes ranging in value from five to ten thousand rupees secured by deposits of gold and silver. The money in circulation in India exceeds one billion dollars. *Germany* has a gold standard with the mark (value $0.208) as the monetary unit. The smallest gold coin is the 5-mark piece. The silver coins are the 5-mark, 2-mark, 1-mark, ½-mark, and ⅓-mark pieces. The paper money includes the imperial treasury notes payable in gold, and the bank notes of the Reichsbank, an institution with individual shareholders, but largely under the control of the government. The issue of notes of less denomination than 100 marks is prohibited. The government of *Austria-Hungary* has recently established a monetary system with the gold crown (value $0.203) as the unit. The gold coins consist of a 10-crown and a 20-crown piece, and the silver coins of a crown and a half-crown piece. As a matter of fact there is very little metallic money in circulation. The money most in use consists of an irredeemable paper currency issued by the Austro-Hungarian Bank in denominations of 10, 100, and 1,000 florins (two-crowns), and by the treasury in smaller denominations. The *Latin Union* which includes France, Belgium, Italy, Switzerland, and Greece has now a single gold standard with the franc (value $0.1929) as the monetary unit. The smallest gold coin is the 5-franc piece; the silver coins are the franc, the 2-franc, the half-franc, and the 20-centimes (one-fifth of a franc). The coins of one country are received at par in the others. *France* issues bank notes through the bank of France. *Belgium* issues bank notes through the bank of Belgium, payable to the bearer at sight, and individuals and associations are free to issue bank notes on their own responsibility. *Italy* has no state bank, but there are in the country six banks which are authorized to issue notes payable on demand. The smallest denomination is 50-lire. *Switzerland* has now a state bank with central offices at Berne and branches throughout the country. *Greece* has three banks authorized to issue notes on such a very low gold and silver reserve that for many years gold has been at a premium. *Spain* has the silver peseta, equivalent to the franc, as a monetary unit. It has the same gold and silver coins as the other countries of the Latin

Union. The only bank of issue in the country is the bank of Spain, a private institution, with certain government restrictions. Its smallest note of issue has the value of 25-pesetas. The *Scandinavian Monetary Union* embraces Sweden, Norway and Denmark. The krone or crown (value $0.268) is the monetary unit. The gold coins are 10-kroner and 20-kronen, and the silver coins are the 2-kronen, the krone, and the fractional currency. *Sweden* has a bank of issue entirely under the control of the state. Joint-stock banks are also permitted to issue notes under restrictions favorable to the monetary system. *Norway* has one bank of issue—a joint-stock bank with the state as principal shareholder. *Denmark* issues notes through a state bank. The monetary unit of *The Netherlands* is the guilder or florin (value $0.402) of 100 cents. The gold coins are the 10-florin and 5-florin pieces. The bank of the Netherlands, situated in Amsterdam, has the exclusive right to issue notes. The monetary unit of *Russia* is the silver ruble (value $0.38) of 100 kopecks. The gold coins are the imperial equal to 10 rubles and the half-imperial. The National Bank of Russia is the only bank of issue in the empire. This bank issues paper money denominations of 1, 3, 5, 10, 25, and 100 rubles. The gold milreis (value $1.08) is the monetary unit of *Portugal*. The only bank of issue in *Turkey* is the Imperial Ottoman the notes of which are payable exclusively in gold. The currency of *China* is made from an alloy of copper, iron, and tin. In all large transactions, silver by weight is the medium of exchange, the Mexican dollar being used in the South and ingots called shoes, in the North. There are large numbers of private banks which issue notes upon their own authority for local circulation. The legal money of *Japan* is the yen of 100 sen. The yen is almost equal in value to our silver dollar. Trade among Japanese is carried on to a large extent by paper money issued under the authority of the government. *Mexico* has a single silver standard The Mexican dollar (el peso) is the unit, and under the name of piaster, is the current coin of several countries in America, Asia, and Africa. There are also gold coins in circulation the smallest (1 peso) being almost equal in value to our gold dollar. The *Central American States* have bank notes but the metallic currency of these republics is largely Mexican. *Chile* is on a silver basis, so far as specie is concerned. The real medium of exchange is a depreciated paper currency. The unit is the peso equal to the 5-franc piece of France. The unit of the *Argentine Republic* is the same but of gold. The actual currency is depreciated paper fluctuating greatly in value.

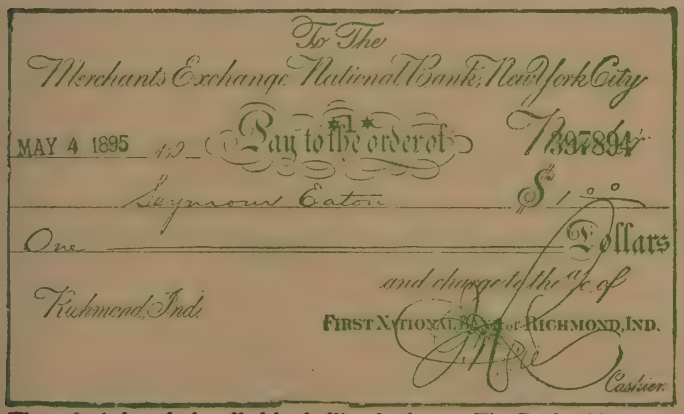
Value in Gold of the World's Coins.

The Equivalent of One.	Sovereign.	Franc.	Mark.	Florin. Austro-Hungarian.	Florin. Dutch.	Rouble.	Escudo.	Kroner.	Milreis. Portuguese.	Milreis. Brazilian.	Piastre. Tunis.	Piastre. Egypt.	Piastre. Turkey
Sovereign	.....	0.04	0.05	0.10	0.08	0.16	0.10	0.06	0.22	0.11	0.02	0.01	0.01
Franc	25.22	.....	1.24	2.50	2.09	4 13	2.60	1.39	5.60	2.83	0.61	0.26	0.23
Mark	20.43	0.81	.....	2.03	1.69	3.35	2.11	1.13	4.54	2.29	0.49	0.21	0.18
Florin, A. H	10 09	0.40	0.49	.....	0.83	1.65	1.04	0.56	2.24	1.13	0.24	0.10	0.09
" Dutch	12 09	0.48	0.59	1.20	.....	1.98	1.25	0.67	2.68	1.36	0.29	0.12	0.11
Rouble	6.10	0.24	0.30	0.61	0.50	.....	0.63	0.34	1.36	1.68	0.15	0.06	0.06
Escudo	9.70	0.39	0.48	0.96	0.80	1.59	.....	0.53	2.15	1.09	0.23	0.10	0.09
Kroner	18.16	0.72	0.89	1.80	1.50	2.98	1 87	.....	4.03	2.04	0.44	0.19	0.16
Milreis, P	4.50	0.18	0.23	0.45	0.37	0.74	0.46	0.25	.....	0.51	0.11	0.05	0.04
" B	8.91	0.35	0.44	0.88	0.74	1.46	0.92	0 49	1.97	.....	0.21	0.91	0.08
Dollar, U. S. A	4.88	0.19	0.24	0.48	0.40	0.80	0.50	0.27	1.08	0.55	0.12	0.05	0.04
" Mexico	4.95	0.20	0.24	0.49	0.41	0.81	0.51	0.27	1.10	0.56	0.12	0.05	0.04
" A. R	5.04	0.21	0.25	0.50	0.42	0.83	0.52	0.28	1.12	0.57	0.12	0.05	0.05
" Chile	5.33	0.21	0.26	0.53	0.44	0.87	0.55	0.29	1.13	0.60	0.13	0.05	0.05
" Uruguay	4.69	0.19	0.23	0.47	0.39	0.77	0.48	0.26	1.04	0.53	0.11	0.05	0.04
" Ven	5.04	0.20	0.25	0.50	0.42	0.83	0.52	0.28	1.12	0.57	0.12	0.52	0.05
" Bolivia	5.22	0.21	0.26	0.52	0.43	0.86	0.54	0.29	1.16	0.59	0.13	0.05	0.05
" Ecuador	5.13	0.20	0.25	0.51	0.42	0.84	0.53	0.28	1.14	0.58	0.12	0.05	0.05
" Nfld	4.80	0.19	0.24	0.48	0.40	0.79	0.49	0.26	1.07	0.54	0 12	0.05	0.04
" P. I	4.95	0.20	0.24	0.49	0.41	0.82	0.51	0.27	1.10	0.56	0 12	0.05	0.04
Yen	4.89	0.19	0.24	0.48	0.40	0.80	0.50	0.27	1.08	0.55	0.12	0.05	0 04
Toman	2.12	0.08	0.10	0.21	0 18	0 35	0 22	0.12	0.47	0.24	0.05	0.02	0.02
Rupee	10.27	0.41	0.50	1.02	0.85	1.68	1.06	0 57	2.28	1.15	0.25	0.11	0.09
Piastre, Tunis	41 68	1.65	2 04	4.13	3 45	6.83	4.26	2.26	9.25	4.64	.....	0.43	0.38
" Egypt	97.69	3.87	4.78	9.68	8.10	16.00	10.07	5.38	21.69	10.96	2.34	.....	0.88
" Turkey	110.71	4.39	5.42	10.98	9.16	18.15	11.42	6.10	24.60	12.44	2.66	1.13	.....

The Equivalent of One.	Dollar. U. S. A.	Dollar. Mexican.	Dollar. Argentine Republic.	Dollar. Chilian.	Dollar. Uruguay.	Dollar. Venezula.	Dollar. Bolivia.	Dollar. Ecuador.	Dollar. Newfoundland.	Dollar. Phillipine Islands.	Yen.	Toman.	Rupee.
Sovereign	0.21	0.20	0.20	.20	0.21	0.20	0.19	0.20	0.21	0.20	0.20	0.47	0.10
Franc	5.18	5.10	5.08	4.73	5.38	5.00	4.84	4.92	5.25	5 10	5.17	11.87	2.46
Mark	4.20	4.13	4.05	3.96	4 36	4.05	3 92	3.99	4.26	4.13	4.19	9 62	1 99
Florin, A. H	2.07	2.04	2.00	1.89	2.15	2.00	1.93	1 97	2.10	2 04	2.07	4.75	0 98
" Dutch	2.48	2.44	2.39	2.27	2.58	2.40	2 32	2.36	2.52	2.44	2.48	5 69	1.19
Rouble	1.25	1.23	1.21	1.14	1.30	1.21	1.17	1.19	1.27	1.23	1.25	2.87	0 59
Escudo	1.99	1.97	1.92	1.82	2.07	1.92	1.86	1.89	2.02	1.96	1.99	4.57	0 94
Kroner	3.73	3.67	3.60	3.40	3.87	3.60	3.48	3.54	3 78	3.67	3.72	8.55	1.77
Milreis, P	0 93	0.91	0.89	0.84	0.96	0.89	0 86	0 88	0.94	0.91	0.92	2.12	0.40
" B	1.83	1.81	1.77	1.67	1.90	1.79	1.71	1.74	1.86	1.80	1.83	4.19	0.87
Dollar, U. S. A	.....	0.98	0.96	0.91	1.04	0.96	0.93	0 95	1.01	0.98	1.00	2 29	0.47
" Mexico	1.02	.....	0.98	0.93	1.06	0.98	0.95	0.97	1 03	1.00	1.01	2.33	0.48
" A. R	1.04	1.02	.....	0.95	1.06	1.00	0 97	0.98	1.05	1.02	1.03	2 37	0.49
" Chile	1.10	1.08	1.06	.....	1.14	1.06	1.02	1.04	1.11	1.08	1 09	2.51	0.52
" Uruguay	0.96	0.95	0.93	0.90	.....	0.93	0.90	0.95	0.98	0 95	0.96	2 21	0.46
" Ven	1 04	1 09	1.30	0.95	1.08	.....	0.97	0.98	1.05	1 02	1.03	2 37	0 49
" Bolivia	1.08	1.05	1.03	0.98	1.11	1.03	.....	1.01	1.09	1.05	1.07	2.45	0.51
" Ecuador	1.05	1.34	1.02	0.96	1.09	1 01	0.96	.....	1.07	1 04	1 05	2 41	0 50
" Nfld	0 99	0 97	0.95	0 9	1.02	0.95	0.92	0.94	.....	0.97	0 98	2.30	0.47
" P. I	1 02	1 00	0 98	0.93	1.06	0.98	0.95	0.97	1.03	.....	1 01	2 33	0 48
Yen	1.00	0 99	0 97	0.92	1.04	0 97	0.94	0.95	1.02	0 99	.....	2 30	0.48
Toman	0 44	0.43	0.42	0.40	0 45	0.42	0 41	0 41	0 44	0.43	0.44	.....	0.21
Rupee	2.11	2 08	2.04	1.93	2.19	2.04	1 97	2.00	2 14	2.08	2 10	4 84	.....
Piastre, Tunis	8.56	8 43	8.26	7.14	8 89	8.26	7 99	8 13	8.68	8.42	8.54	19.62	4.06
" Egypt	20.07	19 83	19.37	18.32	20 83	19.37	18.73	19 06	20 39	19 74	20 06	45.99	9.56
" Turkey	22.76	22.39	21.96	20.77	23.62	21.96	21.24	21 62	23 08	22.39	22.69	52.14	10.78

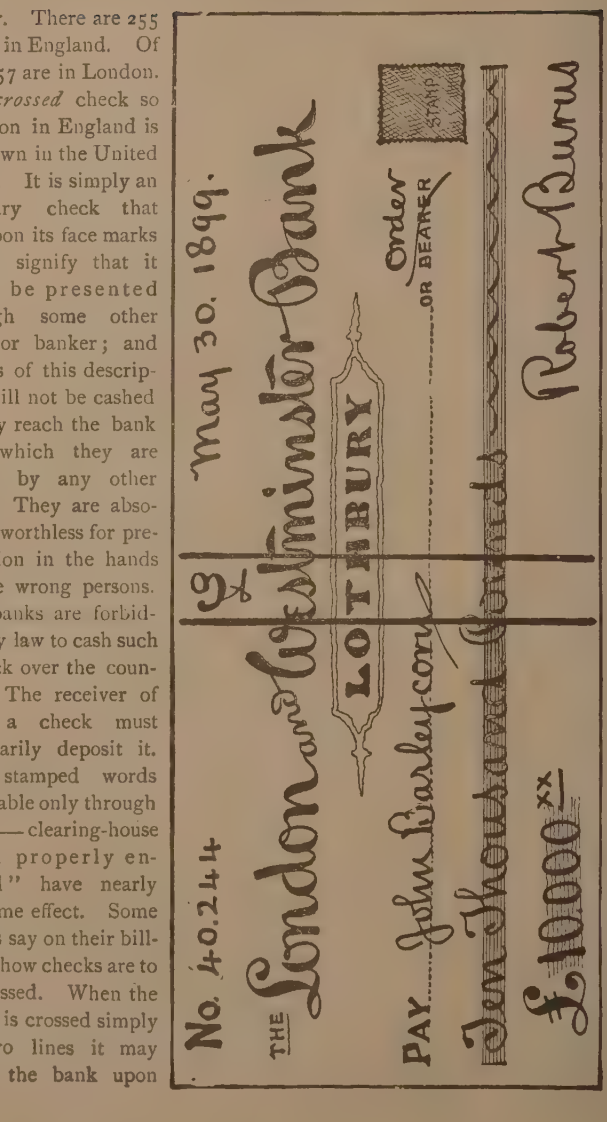
English Money.

Any person may take bar gold to the extent of £20,000 to the English mint and have it returned to him in sovereigns and half sovereigns. The Bank of England receives bar gold at £3 17*s.* 9*d.* per ounce and pays in gold coin. The English sovereign weighs 123.274 grains, and is a legal tender so long as it does not weigh less than 122.5. English silver and bronze coins are *fiat* money, that is, their intrinsic value is materially less than their face value. The difference between the *token* value and the real or intrinsic value is called *seignorage* and this is a quite large source of revenue. English gold coins are a legal tender for any amount; silver coins are a legal tender for only forty shillings or less, and bronze coins for one shilling or less


To The
Merchants Exchange National Bank, New York City
MAY 4 1895 No. Pay to the order of 7397894
Seymour Eaton $ 1 00
One Dollars
and charge to the A/c of
Richmond, Ind.
FIRST NATIONAL BANK OF RICHMOND, IND.
Cashier

The gold is largely handled by bullion brokers. The Bank of England notes are very ordinary looking pieces of white paper with plain black printing, somewhat larger in size than those of the United States. The paper is specially made, is very strong, and is not easily burned. No note is paid out a second time. Every check or draft is paid in new bills. The smallest note is one pound. In sending bank notes by mail the Englishman generally cuts them in halves, takes a careful record of their marks and numbers, and sends one of the halves by registered mail, and the other by ordinary post. The illustration here given is an American check or draft bearing a close resemblance to the Bank of England note. The Scotch and Irish banks have a paper issue of their own, and there are joint-stock banks and private banks that issue bank notes. These bank notes, although they pass current, are not legal

tender. There are 255 banks in England. Of these 57 are in London. The *crossed* check so common in England is unknown in the United States. It is simply an ordinary check that has upon its face marks which signify that it must be presented through some other bank or banker; and checks of this description will not be cashed if they reach the bank upon which they are drawn by any other way. They are absolutely worthless for presentation in the hands of the wrong persons. The banks are forbidden by law to cash such a check over the counter. The receiver of such a check must necessarily deposit it. Our stamped words "Payable only through the —— clearing-house when properly endorsed" have nearly the same effect. Some houses say on their billheads how checks are to be crossed. When the check is crossed simply by two lines it may reach the bank upon



which it is drawn, through any bank; when it is crossed with a bank's name, it must reach the bank upon which it is drawn through the banker whose name appears between the crossed lines. When the drawer knows the name of the payee's banker he usually inserts it; otherwise he simply draws the lines. English banks do not certify checks. Every check must bear a penny stamp no matter for how smal an amount it is drawn. The British *consols* are securities representing the consolidated debt of England; the word *consol* being an abbreviation of consolidated. They are quoted in the financial columns of the newspapers. Here is an illustration: "*Consols are unchanged at* 94⅝ *for cash and* 94⅞ *for November settlement.*" The word settlement is used as we would use the word account. On the London Stock Exchange there are special settling days for securities of all sorts, including transactions in foreign exchange. By "November settlement" it is understood that the consols are to be paid for on the November settling day.

Canadian Money.

Many Americans hesitate to accept Canadian money, usually for the reason that they have difficulty in passing it and partly from ignorance of its security. The Canadian silver coins are in reality of greater value than the corresponding coins of the United States for the reason that they contain more silver. The Canadian one-dollar-bill, two-dollar-bill, and four-dollar-bill are equal in value to the very best securities offered here for the reason that they are issued by the Canadian government and are covered by actual gold and silver in the treasury. The notes issued by the Canadian banks are almost equally good, for the reason that the banks are very large institutions, many of them larger than the largest banks in the United States. The Bank of Montreal is one of the largest and strongest financial institutions in the world. It has a paid-up-in-gold capital of twelve millions and a gold surplus of six millions, and has about forty branches in the large cities and towns of the Dominion. Only two banks in New York city have a capital as great as $5,000,000. The Canadian Bank of Commerce has as many branches. The Merchants' Bank of Canada has six millions of capital and three millions of surplus. No bank is chartered that has not a capital of at least $500,000. There are in all about forty banks with more than 500 branches. These banks issue notes of denominations of $5 and upwards, but the government regulations are so exacting that if a bank should fail the holders of its notes would be almost sure to

receive their full value. These banks always pay out over the counter their own bills. Under our United States system, which leaves each bank so largely dependent upon the fortunes of its locality, and the business of each locality so entirely dependent upon its local banks, it is a common thing to see mutual ruin of banks and businesses in numerous widely scattered localities, while the business of the country as a whole is sound. Such results are impossible in Canada. The widely extended system of each of the great banks, with its branches in every part of the country, constitutes a sort of financial insurance, by which each helps to guarantee the soundness of all; while the Canadian branch systems interlocking at every town leave it simply impossible that any local point of the least importance should for a moment be lacking in the most complete discount, currency, and other banking facilities, so long as the whole business of the Dominion is not involved in common ruin. The currency system is elastic and always meets the demands. Panics for fear of stringency are unknown. A run on a bank as we understand it is impossible.

Note Brokers.

Merchants sell a great many of their notes in the open market, that is, to note brokers. The banks buy these notes from the note brokers. The assistance of the broker who handles commercial paper is a necessary and valuable aid to the purchasing bank. Fully seven-eights of all the paper purchased by New York city banks is purchased upon the simple recommendation of the note brokers. As a rule these brokers simply transfer the paper without guaranteeing by endorsement, its payment. Notes bought by banks from note brokers without their endorsement are held to be guaranteed by them to be all right, in all points, except that which covers the question of whether they will be paid or not. The bank uses its best judgment in taking the risk. If the note dealer, in selling notes to a bank, makes what he believes to be fair and honest representations regarding any particular paper, statements of such a straightforward type that upon them no charge of false pretenses can be made to rest, he simply guarantees the note genuine as to names, date, amount, etc., and that, in selling it, he conveys a good title to the paper. As business men, however, tney are very cautious, and are exceedingly anxious that the paper they sell shall be paid, and as a rule they make good any losses which grow out of apparent misrepresentations on their part.

Single-name Paper.

The custom of issuing single-name paper has grown largely of late. The maker is the borrower, and the buyer must consider his personal credit when making the purchase. It is estimated that two-thirds of all the paper bought by New York city banks is single-name. Such paper makes no pretense to be anything else but what it appears, a simple promise to pay, and in this it differs from accommodation paper. Genuine double-name paper consists of notes given in actual payments of merchandise sales.

Commercial Crises.

Disturbances of the course of trade arise largely from the necessity of re-adjusting its conditions to the common standard and measure of value. The common standard of value is money, and the conditions of trade which require to be adjusted to it are the prices of commodities, and contracts and obligations of all kinds. Contracts and obligations, agreements to pay money at a future time for something presently received, form the credit system of modern commerce. Inability to meet these obligations constitutes bankruptcy, and a great multiplicity of bankruptcies occurring simultaneously constitutes a commercial crisis. If all persons were in the habit of paying immediately for everything received, there could be no debts, and consequently no failures nor panics. Those nations where the credit system has received its widest development, and where consequently the spirit of commercial adventure and speculation is most rife, are most exposed to the ravages of recurring periods of bankruptcy. Money panics are usually preceded by years of active trade, high wages, multiplication of new enterprises, and general prosperity. Each period of abnormal and exciting prosperity is followed by a violent collapse resulting in increased rates of interest, closing of factories, failures of banks and mercantile houses, and enforced idleness of large numbers of people, often resulting in extreme social disturbances. There is no remedy except in the concurrence of mankind to keep out of debt and to avoid all temptation to make gain without equivalent labor. This is impossible however. Civilization is so interlaced with the credit system that it is idle to talk of abolishing it. The interests of mankind require that it should continue, even at the cost of its abuses. There is, too, a desire for gain without labor which is legitimate. Nine-tenths of all the inventions and discoveries which have advanced mankind from the stone age

to the age of electricity have had their origin in this desire. It may be, too, that an occasional crisis is a good thing, in so much that it

Smith Bros. & Co.
CIRCULAR LETTER of CREDIT.
No. B 24609

New York March 25 1898.

Gentlemen:

We request that you will have the goodness to furnish Jerrold Ball the bearer, whose signature is at foot, with any funds he may require to the extent of £ 500-(say Five Hundred pounds Sterling) against his drafts upon MESSRS SMITH BROS. & Co. LONDON: each draft must bear the number (No B 24609) of this letter, and we engage that the same shall meet due honor Whatever sums Mr. Ball may take up you will please endorse on the back of this circular letter, which is to continue in force till March 25 1899 from the present date

We are respectfully, Gentlemen,
Your obedient servants
Smith Bros & Co

THE SIGNATURE OF
Jerrold Ball

To Messieurs
The Bankers mentioned on
the 3d page of this Letter of Credit

shows commercial leaders by an objective lesson the influences which tend to make trade successful or disastrous.

Letters of Credit.

The ordinary letter of credit is the leading and usual instrument for the use of travelers in Europe and has now become such a common feature of banking that every one should be familiar with its form and purpose. We reproduce a fac simile of the first and second pages of a circular letter for £500. The first is the credit proper authorizing the various correspondents of the bank issuing it, who are named on the third and fourth pages, or any other banker to whom the letter may be presented, to pay the holder, whose signature is given on its face, money to the extent of £500. The second page shows how the holder

DATE WHEN PAID		By WHOM PAID	NAME of TOWN	Amt expressed in words	Amt in figures		
Ap.	12	Brown Shipley & Co	Liverpool	Twenty Pounds	£ 20	0	0
April	15	John Munroe & Co	Paris	Sixty Pounds	60		
May	3	Delegge & Co	Brussels	Twenty Pounds	20		
June	6	Stock Lautenschlo & Co	Hamburg	Twenty Pounds	20		
"	18	[illegible]	[illegible]	One Hundred Pounds	100	0	0
July	5	John Munroe & Co	Paris	Fifty Pounds	50		
"	13	Nat. Bank of Scot	Edinburgh	Twenty Pounds	20		
"	20	Northern Banking Co	Belfast	Twenty Five Pounds	25	0	0
"	22	Royal Bank of Dublin	Dublin	Ten Pounds	10	-	-
"	25	Nat. Bank	Cork	Ten Pounds	10	—	—
Aug	1	London & Westminster Bk.	London	Forty Pounds	40	—	—

availed himself of the advantages of the letter. It gives the names of the banks to which he presented his letter and the amounts paid by each. With such a letter a traveler could make a trip around the world and not have in his pocket at any one time more gold or silver or bills than would be necessary to meet immediate local expenses. When a banker issues a letter of credit, the party purchasing it, and who is to use it abroad, places his signature upon a lower corner of the document in the banker's presence. Other copies of the signature are left and are forwarded to the leading foreign bankers drawn upon. When the party buying the draft presents himself at a London or Paris

bank with his letter of credit and asks for a payment upon it, the banker asks him to sign a draft on the American banker issuing the letter, for the amount required, which amount is properly entered upon the letter of credit before it is returned to the payee. Payment is usually made upon the simple identification of comparison of signatures. If a traveler should lose his letter of credit he should notify at once the banks upon and by whom it is drawn. These letters are cash anywhere. Almost any banker in the world will at any time consider it to his advantage to buy a reliable sterling draft on London. Such drafts should sell at a premium anywhere.

The Cheque Bank.

This is an English institution with a branch in New York city and agencies in other cities. This bank sells to its customers a book of checks each of which can be filled up only to a limited amount, as shown by printed and perforated notices appearing on the blank. For instance for £100 one can buy a check book containing fifty blank checks each good, when properly filled up, for £2. Each of these checks is really a certified check, only it is certified in advance of issue. Its payment is guaranteed by the bank rather than by the maker. Any of the thousand or more foreign banks which are agents for the Cheque Bank, sell these check books and cash the checks when presented. The Bank of England is a bankers' bank in the sense that it holds reserves of other banks, and makes those final payments of cash which close the general balance of transactions. The Cheque Bank is a bankers' bank in the opposite sense of making deposits in all other banks and employing them as agents. Although the checks are issued for limited amounts they may be drawn for any amount within the maximum value. The amounts that may be short drawn, go towards the cost of a new check book, or may be returned in cash. A form of claim for the short-drawn balances is provided on the cover of each check book. Check books are made up to suit the customers' convenience, and may be had either with checks all of the same denomination or of assorted values. Paid checks are returned when request for them is made. All checks are issued *crossed* and payable to order. This requires the endorsement of the persons to whom the checks are paid, and the further security that checks can only be cleared by passing through the hands of a banker. A peculiar feature of the Cheque Bank is that it entirely abstains from using, or even holding, the money deposited in payment of check books. This money is left to draw interest and to meet demands, in the hands of the bankers, through whom the check books are issued. These checks are being used largely by travelers instead of letters of credit. The American and other express companies have a form of check which is very similar and which is used largely by Americans traveling in Europe.

Bank Statements.

A bank statement is a balance-sheet of the bank's main ledger, and is sworn to by the cashier and attested by several of the directors. It is published at the time of its making in the local newspapers. The resources in such a statement usually consist of items due from other

financial institutions, bank bills and specie on hand, bonds deposited with the United States treasurer; loans and discounts, consisting of discounted notes, drafts, etc., owned and held by the bank and which are maturing and being paid from day to day; real estate, etc. The liabilities consist of the accounts due depositors and other banks; outstanding circulation of bank notes; undivided profits; surplus fund; original capital stock, etc.

Condition of National Banks.

The statement given below is an abstract of reports made to the comptroller of the currency, showing the condition of the national banks of the United States at the close of business on a particular day. (Cents omitted.)

RESOURCES.			LIABILITIES.		
Loans and discounts		$1,951,846,822	Capital stock paid in		$ 662,100,100
Overdrafts		13,528,536	Surplus fund		246,180,065
U. S. bonds to secure circulation		195,787,200	Undivided profits, less Expenses and Taxes paid		83,920,238
U. S. bonds to secure deposits		26,405,350			
U. S. bonds on hand		25,115,740			
Premiums on U. S. bonds		16,511,917			
Stocks, securities, etc		196,927,758			
Banking house, furniture and fixtures		77,075,488	National bank notes iss'd*	$175,408,528	
Other real estate and mortgages owned		24,193,994	Less amount on hand	5,653,436	
Due from National banks (not reserve agents)		114,702,531	Amount outstanding		169,755,091
Due from State banks and bankers		29,273,688	State bank notes outstanding		66,173
Due from approved reserve agents		222,467,685	Due to other National banks		314,430,137
Checks and other cash items		12,424,519	Due to State Banks and bankers		180,970,706
Exchanges for clearing-house		77,343,972	Dividends unpaid		1,287,568
Bills of other National banks		18,436,845	Individual deposits		1,667,843,280
Fractional paper currency, nickels and cents		1,002,373	U. S. Deposits		24,558,195
Lawful Money Reserve in Bank, viz.			Deposits of U. S. disbursing officers		3,491,787
Gold coin	$120,855,575		Notes and bills rediscounted		6,858,317
Gold Treasury certificates	23,400,		Bills payable		13,645,026
Gold clearing-house cert's	31,901,		Liabilities other than those above stated		3,413,741
Silver coin, dollars	7,263,610				
Silver Treasury certificates	29,550,637				
Silver coin, fractional	5,956,959				
Total specie	220,931,641				
Legal tender notes	113,281,622				
U. S. certificates of deposit for legal tender notes	31,655,000				
		365,868,263			
Five per cent. redemption fund with Treasurer		8,527,580			
Due from U. S. Treasurer		1,080,461			
Total		$3,378,520,536	Total		$3,378,520,536

This statement is made up from the statements of all the banks

and in character it is similar to the statement usually submitted by any one bank.

Bank Debits and Credits.

The bank's *debits* for any day may consist of 1. Deposits—the gross amount of money received on deposit. 2. Matured Loans—notes discounted that have been paid. 3. Interest—money received for interest from all sources. 4. Exchange—money received as exchange on collections. 5. Discount—the discounts on notes and other commercial paper. 6. U. S. Treasury—remittances received in payment for notes sent for redemption. 7. Circulation—new bank notes of the bank's own issue received from the comptroller of the currency. The bank's *credits* may consist of 1. Checks—paid during the day. 2. Loans—gross amount of net proceeds of paper discounted. 3. Expense—running expenses of the bank. 4. Interest—on deposits and rebates on prepaid discounted paper. 5. Exchange—cost of collections made, charges on foreign paper, etc. 6. Dividends—paid stockholders. 7. U. S. Treasury—cash sent for new small legal tenders, etc. 8 Circulation—notes of the bank's own issue retired in any way.

Condition of State Banks.

The following table gives the aggregate resources and liabilities of the state banks at the close of a particular year:

Resources.	*December 31, 189–*
Loans and discounts	$6,993,372
Overdrafts	10,020
Due from banks	1,313,147
Cash on hand	599,625
Stocks and bonds	860,171
Banking house	215,675
Other real estate	76,015
Furniture and fixtures	32,928
Bonds and mortgages	112,799
Current expenses and taxes paid	33,68c
Checks and other cash items	44,323
Other assets	18,360
Total resources	$10,310,130
Liabilities.	
Capital stock	$1,684,360
Surplus fund	916,100
Undivided profits	224,827
Dividends unpaid	16,617
Due depositors	7,160,010
Due to Banks	199,904
Notes and bills re-discounted	68,425
Bills payable	39,000
Other liabilities	885
Total liabilities	$10,310,130

Condition of Savings Banks.

The following table shows the aggregate resources and liabilities of the savings banks of a particular state at the beginning of 189–. The table also sets forth the character of the assets and the proportion which each kind bears to the whole:

RESOURCES.	*Jan. 1, 189–.*
Bonds and mortgages	$16,803,397
United States bonds	4,832,472
District of Columbia 3.65 bonds	541,200
Bonds of the State of New Jersey	17,505
Bonds of cities in this State	4,955,738
Bonds of counties in this State	1,299,690
Bonds of towns and townships in this State	942,416
Bonds of boroughs and villages in this State	152,368
Bonds of cities in other States	290,395
Bonds of counties in other States	15,800
Railroad bonds (first mortgage)	5,317,393
Other bonds and stocks	357,871
Call loans on collaterals	978,366
Banking-house properties	675,889
Other real estate	447,913
Cash deposited in banks and trust companies	1,420,221
Cash on hand	386,400
Interest due and accrued	524,255
Other assets	36,463
Total resources	$39,995,752
LIABILITIES.	
Amount due depositors	$36,149,920
Other liabilities	134,406
Surplus	3,711,426
Total liabilities	$39,995,752

The Value of Paper Offered for Discount.

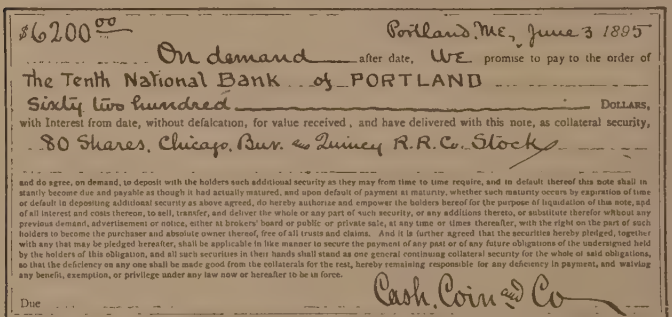
One of the most valuable parts of a banker's education is to learn whom to trust. Every bank should have a well-organized and thoroughly equipped credit department, in charge of some one who can be relied upon to investigate carefully all names referred to him by the officers. A man who desires to borrow money from a bank should offer the same confidence that he would offer if he were going to a wholesale dealer to buy goods. The merchant has a commodity to sell and he looks for facts which will aid him in determining the line of credit to be granted. The banker has money to sell and he should be doubly sure of the responsibility of the party to whom he is selling it because the money does not belong to him. A banker has the right to expect the fullest

confidence on the part of the borrower, and the borrower should furnish him with a complete and detailed statement of the condition of his affairs. It is safe to conclude that when a borrower refuses absolutely to give any information as to his financial condition, his credit is not in the most favorable condition. Many of the banks have blank forms which they from time to time ask borrowers to fill out. These statements show in detail the assets and liabilities of the firm in question; they show the notes which are outstanding, the mortgages on real estate, and many other particulars including the personal or individual credit of members of the firm, if a partnership. The total net worth of the borrower should be first considered; then the character of his business, whether it is speculative or staple; then his record and standing in the community; then his business habits; then a consideration of whether he is in enterprise abreast with modern ideas and methods. The paper offered for discount is of a variety of kinds. The larger proportion of it is from customers of the borrower who have extended their credit by paying their accounts in notes instead of in cash. Such paper is really, though having two names, very little better than single-name paper, for it is not the maker's credit, but the payee's, which the bank usually considers. Many very small notes offered for discount usually indicate a very needy condition. There are times when the character of the merchandise owned by the borrower should be considered. What would it bring under the hammer? Groceries and raw material can usually be turned into cash at a forced sale at very small discount from current prices. Not so with hardware, glass, dry goods, boots and shoes, books, etc. Machinery and fixtures are not a bankable asset upon which to base credit. The banker should note his borrower's bills payable. Why did he give notes? Are they met promptly? Many houses prefer to sell their own paper in the open market and keep their banks open for accommodations when they are unable to secure outside credit. The insurance carried should be considered, also the volume of business done. A large business on moderate capital, with long credits, will naturally have large liabilities, while a small business, with liberal capital, and short credits, should have small liabilities. There are many firms which carry two or more bank accounts and others who sell their paper to out-of-town banks. In buying paper it is important to ascertain whether the firm is in the habit of taking up paper at one bank by floating a loan at another. A prominent banker classifies paper as to its discount value as follows: 1. Bankers' paper including bills of exchange. 2. Remittance paper—

bills drawn by houses abroad on banks or correspondents in Europe. 3. Inland drawn paper—bills drawn by shippers of goods on the houses to whom the goods are shipped. 4. Brokers' paper—bills drawn by importers against commodities placed in brokers' hands for sale. 5. Trade paper—bills arising out of our manifold trades and industries. 6. Drafts with bills of lading attached. 7. Paper having personal endorsements. 8. Paper secured by collateral. 9. Individual—or one name paper.

Mercantile Agencies.

In large cities and towns, bankers and other business men should avail themselves of the advantages offered by mercantile agencies. These concerns report to their subscribers upon the credit of men in



$6200.00 Portland, Me., June 3 1895

On demand after date, WE promise to pay to the order of

The Tenth National Bank of PORTLAND

Sixty two hundred DOLLARS,

with Interest from date, without defalcation, for value received, and have delivered with this note, as collateral security,

80 Shares, Chicago, Bur. & Quincy R.R. Co. Stock

and do agree, on demand, to deposit with the holders such additional security as they may from time to time require, and in default thereof this note shall instantly become due and payable as though it had actually matured, and upon default of payment at maturity, whether such maturity occurs by expiration of time or default in depositing additional security as above agreed, do hereby authorize and empower the holders hereof for the purpose of liquidation of this note, and of all interest and costs thereon, to sell, transfer, and deliver the whole or any part of such security, or any additions thereto, or substitute therefor without any previous demand, advertisement or notice, either at brokers' board or public or private sale, at any time or times thereafter, with the right on the part of such holders to become the purchaser and absolute owner thereof, free of all trusts and claims. And it is further agreed that the securities hereby pledged, together with any that may be pledged hereafter, shall be applicable in like manner to secure the payment of any past or of any future obligations of the undersigned held by the holders of this obligation, and all such securities in their hands shall stand as one general continuing collateral security for the whole of said obligations, so that the deficiency on any one shall be made good from the collaterals for the rest, hereby remaining responsible for any deficiency in payment, and waiving any benefit, exemption, or privilege under any law now or hereafter to be in force.

Due Cash, Coin & Co

various lines of business. They gather their information from a variety of sources. This service has been very much perfected of late years, and after making all due allowance for the inherent defects of the system, it is still a useful adjunct to the man who is giving credit. *Bradstreets* and *Dun & Co.*, are the two largest mercantile agencies in this country.

Savings Banks.

Savings banks have no special capital owned by stockholders. Their capital is the money received on deposit, which, of course, is the property of a great many people. Every depositor is an owner in the bank, and the profit is paid to depositors in interest. This capital is invested in choice securities. The corporation is simply the agent or trustee of the whole body of depositors, and works for their account and benefit and not for its own. In most of the states, the savings

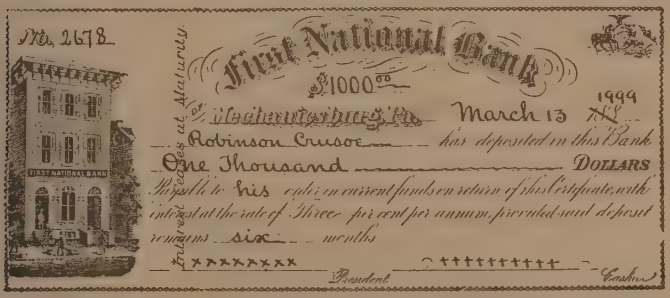
banks are organized under State laws and are in a limited way under State supervision. Their chief purpose is to encourage the saving of money by the common people. In some countries government savings banks have been established. In Canada almost every post office is a branch of the government post office savings bank.

Demand Collateral Note.

An illustration is given on page 86 of a demand collateral note. The bank loans money payable on demand and accepts, in this instance, railroad stock as security. The stock is held by the bank until the note is paid, and if not paid, the stock becomes the property of the bank.

Certificate of Deposit.

If you deposit money temporally in a bank for safe keeping you will receive a receipt therefor. This receipt is usually called a certificate of deposit. See illustrations. It often occurs that such certificate is used instead of a bank draft, in the payment of distant bills. Interest is allowed under certain conditions. It is practically a bank's check on itself. In issuing certificates of deposits to strangers the bank should take their signatures upon the margin of the certificate book, so that, when the certificates come home for redemption, the endorsement may be compared with this original signature, if it seems necessary. Of course every properly managed bank has a ledger account of certificates of deposits issued, which is a full record of the amounts and names of all certificates issued, together with their dates and numbers. Returning certificates can be compared with this record as they are presented for payment through clearing-houses and over the counter.


No. 2678
First National Bank
$1000.00
Payable at Maturity
Rochesterburg, Pa. March 13 1899
Robinson Crusoe has deposited in this Bank
One Thousand DOLLARS
Payable to his order in current funds on return of this Certificate with
interest at the rate of Three per cent per annum, provided said deposit
remains six months
President
Cashier

Waiver of Demand and Notice.

All endorsed demand notes held by a bank should start with a

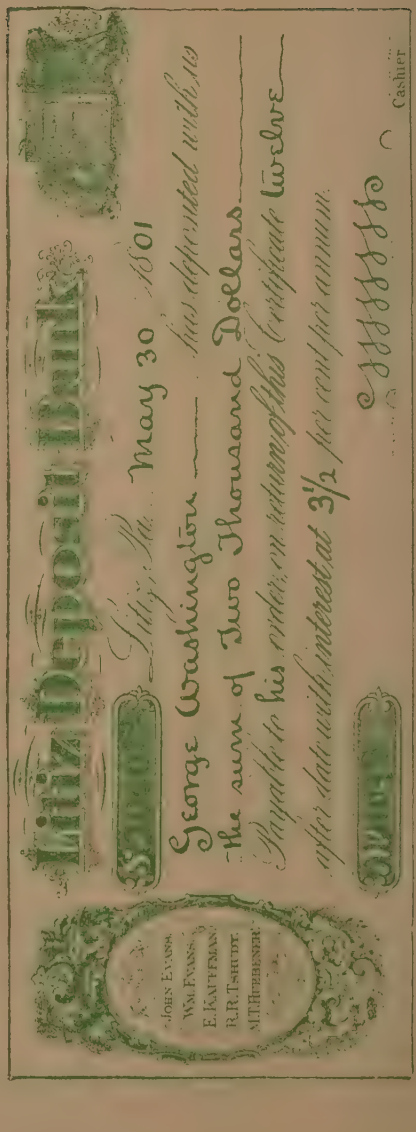
waiver of demand and notice by the endorser, since in time (in some states in 60 days) endorsers are lost—unless a demand for payment is made upon promisors —if this precaution has not been attended to.

Usury and its Penalty.

The laws of some of the states for collecting more than the legal rate of interest are quite severe. National banks which collect more than the legal rate can only be proceeded against under the U. S. Interest. Penalty Act which provides that usury shall be punished by a forfeiture of twice the amount of interest paid, if action is commenced within two years of the time of such usurious practice, and that recovery can be had for the entire amount of interest paid at any time.

Bank Examinations.

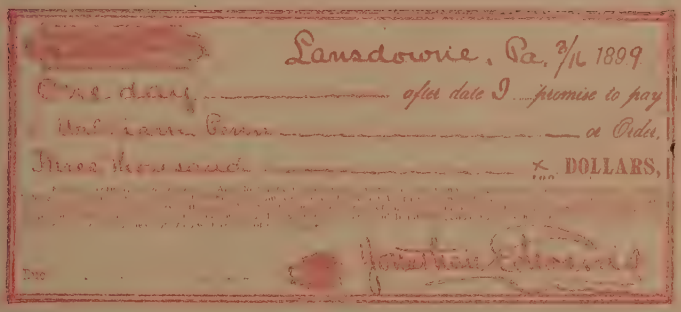
National banks are examined once or twice a year by the United States Bank Examiner who has authority from the Comptroller of the



Currency to whom his reports are made. These reports are seldom if ever seen by bank officers, and unless the examiner chooses to inform them that everything is right they are none the wiser. When a National Bank becomes embarrassed it is the business of the Bank Examiner to look thoroughly into its affairs and if necessary to close its doors.

A Judgment Note.

Some of the states, noticeably Pennsylvania, have a form of promissory note called a judgment note. In this form of note the maker confesses judgment if the note is not paid and authorizes the court to take possession of sufficient of his property immediately to satisfy the



amount of the claim. It is really a very severe form of contract and should be given only under the most extreme conditions.

Suggestions to Bank Depositors.

Don't exaggerate your financial condition. The bank has a history of it on its books. Do not borrow money to swell your deposits. Don't ask for special favors in the way of credit; good security is all the bank asks. Your intercourse with bank officers should be candid and courteous. Make your deposit as early in the day as possible. Never exchange checks to make large deposits. Never make deposits without your bank book. Avoid unnecessary conversation with the clerks. Make it an invariable rule to give checks only out of your own check book. Never give out checks dated ahead. Always consider a check paid when you give it out and mark the amount from your balance. Let all your dealings be strictly honorable.

Exchange Terms.

There are several terms used in connection with exchange which should be understood. *Bankers' Bills* of exchange are bills drawn by bankers on bankers. *Commercial Bills* are those based upon movements of merchandise, and drawn by merchants. *Documentary Bills* are those which are accompanied by bills of lading. Normal exchange rates are those quoted in newspapers; there are lower or *inside* rates which are made to brokers through whom most of the buying and selling is done.

Collection Laws.

An *attachment* is a writ issued at the commencement of, or during a suit at law in court, commanding the sheriff, or other proper officer, to attach the property of the defendant, to satisfy the demands of the plaintiff. The property of corporations may be attached as well as that of individuals. By this process the plaintiff gains a lien on the attached property, which lien will await the judgment of the court in the suit. In many of the states the defendant may dissolve the attachment by giving a bond, with sureties, that he will pay such judgment as the plaintiff may obtain in the suit. A suit is ended by the court's giving a final *judgment*, either for the plaintiff or for the defendant, at the same time fixing the amount in dispute, if judgment is for the plaintiff. *Execution* is the act of carrying into effect the final judgment of a court. If property of any kind is sold under execution, the proceeds go to satisfy the judgment and any costs or charges; and then, if there is any surplus, it belongs to the defendant. By the *homestead* and *exemption* laws of many states, certain kinds and amounts of property are exempted from attachment and sale on execution. By *garnishment* or *trustee process* is meant the attaching of money or goods, due a defendant, in the hands of a third person. By *exemption* is meant the right given by law to a debtor to retain a portion of his property free from a sale on execution at the suit of a creditor.

EXAMINATION QUESTIONS.

1. Give some particulars in which the Bank of England differs from our larger National Banks.

2. Enumerate some of the advantages afforded to the community and to commerce in general by banking institutions.

3. What in a general sense is meant when we speak of the *currency* of a country? Is the same thing meant when we speak of the *cash circulation* of a country?

4. Tell how you would proceed to open an account with a bank. Make a copy of a deposit ticket containing a record of bills, gold, silver, checks, and an express money order.

5. Give in brief the duties of each of the following bank officers: president, cashier, paying teller, receiving teller, discount clerk, bookkeeper, attorney, messenger.

6. A bank check is a demand order for money, drawn by one who has funds in the bank. How does a check differ from an order on John Smith to pay *bearer* a certain sum of money?

7. How does a check differ from a sight draft?

8. Why is it important that blank checks should be very carefully written up? Illustrate.

9. A check has no date. Does this make it void? How about a check dated months ago? Is a check dated on Sunday good? How about a note? Why are checks sometimes dated ahead? Is it necessary that your check be written on the prescribed blank form? Are you at liberty to print your own form of check?

10. Write out in full in the form of a business letter the check which you find on page 15.

11. How would you write a check for 75 cents?

12. Describe some of the common safety devices for protecting checks against fraudulent persons.

13. You present a check for payment at a bank where you are unknown. The paying teller asks for a satisfactory identification. You and he have no common acquaintance who can identify you. How would you proceed to show that you were really the person you represent yourself to be?

14. How would you word a check to give to a person who is unknown at your bank but who wishes to draw the money over the counter?

15. You are sending a check through the mails to John Brown, Chicago. How will you prevent the check from falling into the hands of the wrong Brown?

16. You are spending a few days with a business friend in his city. You receive a check for $100 and wish to get it cashed. How can your friend secure for you the prompt payment of the money at his bank if he is unable to go with you for the purpose of identification?

17. You identify A. B. at your bank. The check A. B. presented turns out to be a forgery. Are you responsible?

18. You receive a forged check from A. B. which you in good faith endorse and get cashed. The bank finds out that it is a forgery. Can they hold you responsible?

19. A. B. transfers a check to you by a blank endorsement. It is then payable to bearer. How can you legally make it payable to your order?

20. A. B. gives C. D. a check drawn to his order. C. D. endorses it: "*For Deposit, C. D.*" He afterwards hands it to E. F. in payment of a bill. Can E. F. cross out the "*For Deposit?*"

21. How will you write a check to draw money from your own account?

22. You are treasurer of Bethany Church. You receive a check drawn payable to the order of "*Bethany Church.*" How should you endorse the check?

23. What is meant by power-of-attorney? How should an attorney endorse checks for any person for whom he is acting?

24. The words "endorsement guaranteed" are sometimes found stamped on the back of cancelled checks. What is meant?

25. You are buying a draft on New York and are paying for it at your own bank by your check: how will you word the check?

26. A check which you deposited some days previously, is returned to you marked "No funds." Explain. What would you do in such a case?

27. How can the payment of a check be stopped?

28. What is a *certified check?* Note the illustration on page 22. Why is it made payable through the clearing-house? When is it customary to get checks certified?

29. Why are bank drafts more acceptable in trade than individual checks?

30. What are the advantages and what the disadvantages of making collections by commercial drafts?

31. A of Philadelphia draws at 30 days on B of Lynn in favor of C of Boston. Follow the draft from the time it leaves A's hands until B files it away as a note which he has paid.

32. "In this city *call loans* are quoted at 3 @ 4 per cent. and *time paper* at 3½ @ 6 per cent. In New York the quotation for *time money on collateral* is 1 @ 3 per cent. for *all dates*; for *commercial paper* 3 @ 5½ per cent."

Explain the meaning, in a commercial sense, of the phrases printed in italics.

33. "Commercial paper is in good demand by all the *usual buyers*, but the scrutiny of the names is very rigid, for, with the low rates ruling, buyers do not care to take the risk of failure to meet the notes at maturity."

Who are the usual buyers? Why is the scrutiny of the names rigid? What risk do buyers take and under what circumstances are they obliged to meet the notes at maturity?

34. If a note were about to be transferred to you by endorsement and delivery in payment of a debt, would it make any difference to you whether or not it was overdue? Explain in full.

35. What are the advantages to the banks of a city of their central clearing-house?

36. Show how all the banks of the world are connected through the clearing-house system. Illustrate by showing how a draft on a merchant in York, England, would be collected by a manufacturer in Elgin, Ill.

37. I find the number 27 stamped in large figures on the face of a cancelled check. What does it mean?

38. How do state and national banks differ as to their organization? How do banks differ from trust companies?

39. To what do bankers give the name *kiting?*

40. Who is liable when a forged check has been paid?

41. What is standard gold worth an ounce? What is the weight of a $20 gold piece?

42. Describe in detail the various kinds of United States bills which pass as cash. How do these bills differ from promissory notes?

43. A bank note is very much mutilated and fully three-tenths of it is gone entirely. It, however, shows the name of the bank and the signature of one of its officers. Will it be paid in full?

44. Distinguish between *discounting* and *buying* paper as these terms are used by bankers.

45. A national bank has a capital of $500,000. A customer asks for a loan of $62,000 on endorsed paper. Can the bank legally grant the loan?

46. A national bank has $6,000 on deposit with the United States treasurer for 146 days, drawing interest at 3 per cent. How much interest should be paid? (Ans. $72).

47. What is meant by borrowing money on *collaterals*? How is this done?

48. Explain the meaning of *negotiable*.

49. Explain how a non-negotiable promissory note should be worded.

50. A note is drawn March 1, at 4 months after date. When will it mature if in New York? When in Philadelphia?

51. A. B. gives C. D. a note in which he promises to pay a bill of $200 in potatoes at market value. Is such a note negotiable? Is it a good contract?

52. A. B. wishes to borrow credit from C. D. in the form of an accommodation note. How should such a note be worded? Why should C. D. be the payee if A. B. does not owe him anything?

53. A steals a horse from B and sells it to C. B finds the horse in C's field and takes it. If it were a promissory note instead of a horse, would C have a good title to it?

54. If an endorser is compelled to pay a note against whom has he a good claim?

55. A note is drawn payable to the order of A. B. How can A. B. transfer it without becoming liable for its payment?

56. Why and how are notes protested? Why is a formal protest sometimes desired even though the paper bears no endorsements?

57. Tell how you would receipt for a payment on a note. Why is not an ordinary separate receipt sufficient?

58. A note is worded "*I promise to pay*" and is signed by two persons. Is either responsible for the whole amount or for only one-half the amount?

59. Write out in full in the form of a business letter the commercial draft which you find on page 32.

60. A sight draft for $200 is presented for payment by a bank messenger at your office. You have money on deposit but have not $200 in bills convenient. The messenger will not take your uncertified check. How can you meet the conditions?

61. Dombey & Son give David Copperfield a check on the National State Bank of Camden, N. J., for $27.13. Copperfield transfers the check to you by endorsement and you endorse it for deposit. Make a copy of both sides of the check.

62. On Monday morning you have cash $94.27 in your cash drawer, and the balance in your bank to your credit is $496.25. During the day you receive bills and silver $537.46, and a check for $94.59, and you pay out in cash (bills and silver) $243.18. You deposit $219.83, and you issue three checks ($29.13; $14.85; $46.17) in payment of bills. On Tuesday morning you deposit all the cash on hand. What should your bank balance be then?

63. How are out-of-town notes collected? When would you consider it wise and when unwise to take a note in settlement of an account? How would you proceed to get a note discounted at your bank?

64. How would you endorse a check in your favor upon the face of which your name is written incorrectly?

65. Chas. James owes you $320. He is considered a *bad pay* but he has property. Would it be advisable to get a note from him in settlement?

66. What are the advantages, if any, of holding a note already matured rather than in taking a renewal?

67. Who should pay the protest fee of protested paper?

68. Is it a criminal offence (1) to draw a check for more money than you have on deposit, (2) to draw a check on a bank where you have no money on deposit?

69. If there are no endorsers, is an unpaid note as good after maturity as before?

70. Is there any limit to the number of endorsers on a note?

71. What would be the effect upon foreign exchange quotations under each of the following conditions:

1. Very large importations of foreign goods.
2. Discovery of very productive gold mines in the United States.
3. American goods or products not wanted abroad.
4. American securities in great demand abroad.
5. Export trade entirely by American ship-owners.
6. Rates of interest lower here than in Europe.
7. Large numbers of Americans traveling in Europe.
8. Heavy interest payments on securities owned abroad.
9. Gold carried free by all shippers.
10. Cost of shipping gold very much increased.

72. Contrast the Canadian banking system with that of the United States, pointing out some of the advantages of each.

73. Explain briefly the meaning or purpose of "instruments of credit," "safe-deposit vaults," "fidelity insurance," "seignorage," "sterling exchange," "letter of credit," "fiat money," "clearing-house certificate," "duplicate bills of exchange," "a bank's correspondents."

74. The following is a complete list of the items appearing in a National Bank's weekly report:

Loans and discounts, $3,320,699. Capital stock paid in, $500,000. Individual deposits, $3,015,485. Undivided profits, $————. Overdrafts, $5,216. United States bonds to secure circulation, $152,500. United States bonds on hand, $126,650. Premiums on United States bonds accrued, $9,695. Surplus fund, $125,000. National bank notes issued, $135,485. National bank notes (own issue) on hand, $14,625. Securities on hand, $304,206. Banking house furniture, $12,608. Mortgages owned, $1,984. Due from other banks, $905,168. Checks on hand, $18,427. Exchanges for clearing-house on hand, $49,895. Bills of other national banks on hand, $13,695. Fractional currency on hand, $984. Due to other national banks, $1,269,800. Dividends unpaid, $1,176. United States deposits (with us), $114,697. Gold coin on hand, $188,402. Gold treasury certificates on hand, $121,275. Silver dollars on hand, $1,800. Clearing-house certificates on hand, $5,000. Silver treasury certificates on hand, $53,648. Legal tender notes on hand, $470,416. Five per cent. redemption fund with United States Treasurer, $6,695.

Make a neat copy of these items, separating them into resources and liabilities, and showing the correct "undivided profits."

75. Tell how it is possible for a young man of good character but without "moneyed" friends to secure bonds for his faithful conduct in a responsible position.

76. How does Canadian paper money differ in its security from American paper money?

77. Give the general dating and credit rules which custom has established with reference to selling on credit and paying monthly bills.

78. A man buys goods on March 23, and is to be allowed a discount of 3 per cent. if paid within 30 days. What is the last day upon which payment can be made and the discount claimed?

79. What is the usual method of endorsing drafts placed in a bank for collection?

80. "*No protest; tear off this before presenting.*" Explain.

81. Why are drafts attached to bills of lading usually drawn at sight or at one day?

82. Explain what is meant by a *set-off* to a claim.

83. In what leading particulars do promissory notes differ from contracts?

84. What in money is considered *legal tender*?

85. Can you give any reason why it is necessary in clearing-house management to have rules more exacting than in the management of ordinary business?

86. A new national bank has been established in a large city. Can the clearing-house of that city refuse to admit it to membership?

87. A young friend wishes to open a bank account. He has had no business experience, and writes to you for advice. Answer his letter fully.

88. What are the advantages, if any, of making your notes payable at your own bank? Are there any disadvantages?

89. When rates are high, bankers prefer to deal in long-time paper. Why?

90. John Smith deposited $3,000 on Jan. 2, 1886, in the First

National Bank to the credit of his son. His son demands the money Jan. 2, 1897. Can he demand interest?

91. Give a few of the leading differences in organization and management between trust companies and banks.

92. A is a debtor to B. B wishes to know the extent of A's bank account. Can he get the information?

93. Give some particulars of the currency famine of 1893. Was there less money in the country than usual? To what extent was the emergency currency issued by many mercantile houses illegal?

94. Discuss fully the advantages of the extensive credit system of the world's trade and industry. Has it any important disadvantages?

95. Why are bills of exchange drawn in duplicate?

96. "The imports and exports of bullion is the real test of exchange." Verify the truth of this statement by added explanation.

97. "A favorable *real* exchange operates as a duty on exportation, and as a bounty on importation." Explain.

98. Is the "balance of trade" the same as the "balance of indebtedness"?

99. Enumerate conditions which will make an exchange expense on a large draft on San Francisco bought in New York.

100. Find the cost of freight and insurance on a shipment from New York to London of a million dollars.

101. Account for the fact that London is the financial center of the world.

102. What is meant by the *Latin Union* in the world's financial systems?

103. Describe the money of Great Britain.

104. How do Canadian $4-bills differ from Canadian $5-bills in the matter of security?

105. Name the largest bank (1) in Europe, (2) in North America.

106. Where is the *Chemical National Bank* located? Account for the fact that its stock sells at such an enormous figure.

107. A run on a bank such as is not infrequent in the United States is unknown under the Canadian banking system. Account for this.

108. Describe the *crossed check* as used in England. Have we the same idea in any other form in this country?

109. In a London paper a certain stock is quoted at a certain price for "May settlement." What is meant by "May settlement"?

110. Explain in detail the business of a note broker giving some particulars of his responsiblity in connection with the paper handled.

111. Distinguish between what is known as *single*-name and as *double*-name paper.

112. Account in some measure for the constantly recurring seasons of financial depression.

113. Describe fully the plan and purpose of a letter of credit. Name a few of the leading American banking houses which issue such letters.

114. Enumerate the leading items of resource and liability in a national bank statement.

115. A bank receives from the comptroller of the treasury $100,000 in new bank notes of its own issue. What ledger entry?

116. A bank retires $10,000 of its own bank notes. What entry?

117. Discuss fully the points which should enter into a proper estimate of the value of paper offered for discount.

118. To whom does the surplus fund of a savings bank belong?

119. Name two leading mercantile agencies. In what way do they serve business houses? Tell something of their methods.

120. Describe the form and use of a certificate of deposit. How does it differ from a bank draft?

Stocks, Bonds, and other Securities.

The Stock Exchange.

The general public too often regard the stock exchange merely as a noisy congregation of brokers who gamble in the securities of governments and corporations, under the guise of legitimate business. A deeper insight, however, into the character and functions of these institutions will admit the important part which they play in the financial mechanism of the country. The exchanges of the world are instruments of enormous economic value in subdividing and distributing capital and in directing its employment in great commercial and industrial enterprises. When the Wall street man goes down to his office his first inquiry is for the two-o'clock prices on the stock exchange of London, which are received before ten o'clock in New York. The quotations of American stocks, with the accompanying price of consols and the Bank of England rate, give him the financial condition abroad translated into figures by the keenest financiers. New York has no more entertaining public exhibition than its Stock Exchange. The visitor who, for the first time, looks down from a gallery upon its members in the act of transacting business, is astonished at the turmoil and confusion he witnesses. There is no reason why bonds and shares should not be publicly dealt in, and in large quantities, as well as dry goods, corn, or cotton. But, unfortunately, few stock exchanges confine their transactions to ordinary legitimate business. The members are divided into two classes—those who execute commissions for others, and those who deal on their own account. Among the latter are the

boldest and sharpest speculators of the day. You will look in vain in the quotations for the stock of dozens of corporations whose securities are among the choicest investments. It is upon fluctuations that stock speculation grows strong, and the largest profits are often made on the poorest stocks. In London, Paris, Berlin, Vienna, and New York there are very large private banking institutions which buy and sell bonds and stocks on the stock exchanges of the world on commission. These great financial institutions negotiate loans for governments and great corporations and are the intermediaries in all the great movements of capital from one country to another. The London Stock Exchange has scarcely more than one hundred years of history. In the early part of the century the elder Rothschild was one of the giants "on 'change," and it was in this business that he amassed the great fortune which makes the name of his house synonymous with money power. The London Stock Exchange occupies an old dingy building on Capel Court close to the Bank of England. The membership is not limited to a fixed number as in Paris and New York. One of the marked peculiarities of the Stock Exchange of London is the distinction between those who act as agents for the public, and who are technically called *brokers*, and those who do business on their own account and are described as *dealers* or *jobbers*. In the Paris *Bourse* all agents are strictly forbidden to trade on their own account. The New York members who operate on their own account are called *room-traders* or *scalpers*, whose profits or losses consist in quick turns made during the day. They endeavor to detect immediate monetary influences without considering the ultimate tendency of prices. Nominally the stock exchanges guard public interest in declining to admit to their regular quotations the stocks of questionable enterprises. Before any shares, bonds, or debentures can be quoted in the official lists, application must be made in behalf of such issues and their bona fide character must be established. The membership of the New York Stock Exchange is limited to about 1,100 and seats becoming vacant by retiring members bring prices all the way from $20,000 to $50,000 each. Stocks and bonds sold in the *regular way* are deliverable to the buyer during exchange hours on the following day. Transactions are quickly collected and rapidly reported to the outside world. In hundreds of offices in New York City and in other American cities can be seen a little instrument called a *ticker* which automatically prints abbreviated names of stocks, with their prices, on a narrow ribbon of paper. These *tickers* are rented to these offices, as are telephones by New York telegraph

companies, and as fast as the sales are made the quotations are ticked off in thousands of offices in all parts of the United States.. There are many exchange institutions in the country. Nearly every large city has its stock exchange, and scattered in trade centers are cotton exchanges, produce exchanges, petrolium exchanges, mining exchanges, etc.

Technical Terms of Stock Exchanges.

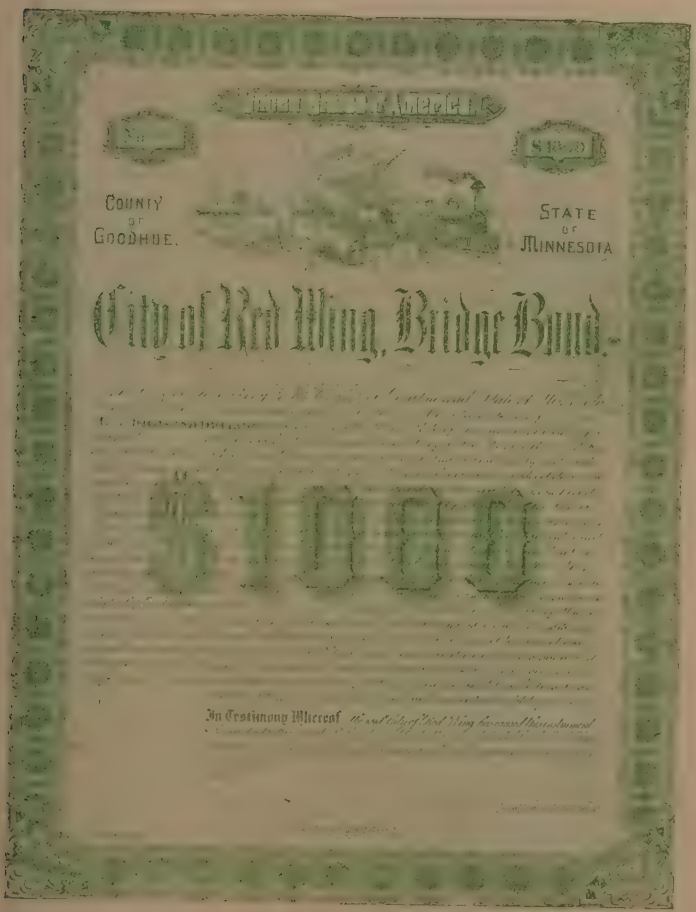
The term *bull* is applied to those who are purchasers of stock for long account, with the purpose of advancing prices as the tendency of a bull is to elevate everything within his reach. The term *bear* is applied to those who sell stock short, with the purpose of depreciating values. The *bear* operates for a decline in prices. To buy one stock and sell another with the expectation that the one bought will advance and the one sold will decline, is a *hedge*. The broker's charge for his services is called a *commission*, which in the New York Stock Exchange is one-eighth of one per cent. each way on the par value of the security purchased or sold. A *point* means one per cent. on the par value of a stock or bond. *Stock privileges* or *puts and calls* are extensively dealt in abroad and to some extent here. A *put* is an agreement in the form of a written or printed contract filled out to suit the case, whereby the signer of it agrees to accept upon one day's notice, except on the day of expiration, a certain number of shares of a given stock at a stipulated price. A *call* is the reverse of a *put*, giving its owner the right to demand the stock under the same conditions. A *put* may serve as an insurance to an investor against a radical decline in the value of stocks he owns; a *call* may be purchased by a man whose property is not immediately available, but who may desire to be placed in a position to procure the shares at the *call* price, if they are not below that in the open market when he secures the necessary funds. The speculator usually trades on *margins*. If he has $500 to invest he buys $5,000 worth of stock, his $500 being ten per cent. of the total amount He expects to sell again before the remaining amount falls due. The *margin* is usually placed by the speculator in the hands of a broker as a guaranty against loss. Although these brokers are really agents for others, yet *on 'change* they stand in the mutual relationship of principals. A *margin* is merely a partial payment, but a broker buying stock for a client on *margin* is compelled to wholly pay for it. If he has not the necessary capital his usual custom is to borrow from banks or money-lenders, pledging the stock as collateral security. In foreign exchanges the element of credit enters more largely into the conduct of

business. Where the credit of the client in London is established, his broker does not, ordinarily, call on him for any cash until the next "settlement day." There are a variety of methods of securing what is called a *corner*, that is, a controlling interest in marketable stocks which others are compelled, owing to previously made contracts, to buy. A *syndicate* is a party of capitalists who unite their resources to accomplish some financial object, such as the purchase of a property, a public loan, an issue of bonds or stocks, or any other undertaking requiring large capital. A *pool* is in some respects similar to a syndicate. The funds of individuals are put into a common undertaking with a view of manipulating particular securities and dividing the profits. It flavors of speculation if not of gambling. A *boom* is an expansion of credit and a large inflation of value. A *panic* is an unusual fright among speculators which reduces prices and causes a general collapse of credit. A small *boom* is called a *flurry*. The rules of the exchanges of New York forbid trading after closing hours, but in times of great financial excitement business overflows into the streets and hotels and is called trading *on the curb*. A *wash sale* is a fictitious transaction made by two members acting in collusion, for the purpose of swelling the volume of apparent business in a security, and thus giving a false impression of its value. Stocks sell *dividend-on* between the time the dividend is declared and the day the books of the company close for transfer; after that they sell *ex-dividend*, in which case the dividend does not go to the buyer. When a company decides not to declare a dividend it is said to *pass its dividend*. To sell stock *buyer 3* is to give the buyer the privilege of taking it on the day of purchase, or on any of the three following days, without interest; and to sell stock *seller 3* is to give the seller the privilege of delivering it on the day of purchase, or on any one of the three following days, without interest. *Buyer 3* is a little lower, and *seller 3* a little higher than *regular way* when the market is in a normal condition. *Bucket-shops* are establishments conducted nominally for the transaction of a stock-exchange business, but really for the registration of bets or wagers, usually for small amounts, on the rise or fall of the prices of stocks, there being no transfer or delivery of the commodities nominally dealt in. There are thousands of these counterfeit concerns throughout the country conducted without any regard for legitimate commercial enterprises.

Brokers.

Brokers are persons employed as middlemen to transact business

or negotiate bargains between different merchants or individuals. There are bill or exchange brokers who buy and sell foreign bills; note brokers who deal in promissory notes; stock brokers who buy and sell stocks



for others; ship brokers who buy and sell cargoes in transit or upon arrival; insurance brokers who are middlemen between the insurance companies and the insured; custom house brokers who act for mer-

chants in getting consignments through the custom house; and brokers in cattle; in dry goods; in coffee; in cotton; in drugs; in flour; in grain; in hides; in oil; in real estate; in sugar; in tobacco; in wool; in everything or anything that is bought or sold in large quantities. By attending to one class of business constantly they acquire a more intimate knowledge of its various details, of the houses from which to buy, of the best market for sales, and of the credit of those engaged in it, than could possibly be expected of a general merchant. The large manufacturers living outside of the great centers find it to their advantage to engage brokers to buy their raw material for them, so we find that each broker has his regular customers, and for a small commission he goes into the market and buys or sells as carefully as though he were spending his own money. It is to these circumstances—to a sense of the advantages to be derived from using brokers in the transaction of business—that they are so extensively employed in New York, Chicago, London, and other great cities. In France the brokers are called *agents de change*, and their number in Paris is limited to sixty. They are severally obliged to give bonds for the prevention of abuses, and are not allowed to charge more than a fixed rate of commission.

Stock Companies.

To organize a stock company it is necessary for a number of persons to come together and make a certificate to the effect that they propose to form a company to bear a certain name, for the purpose of transacting a certain kind of business at a certain place. The certificate states that they propose to issue a certain number of shares of stock at a certain price per share, that the capital stock is to be a certain amount, and that the company is to continue to exist for a definite period of time. Blank forms for such certificate are supplied by the secretary of the state where the company is being organized and when properly filled out, signed, and delivered to him, he issues a license or charter to the persons making such certificate, giving them permission to open books, sell stock, and carry on the enterprise outlined. State laws regarding stock companies differ very largely.

Shares of Stock.

The usual par value of a share of stock is $100. That is, if a company organize with a capital of $50,000, they will have 500 shares to sell. Each person who buys or subscribes for the stock, that is, who joins the company, receives a *certificate of stock*. See illustrations.

These certificates are transferable at the pleasure of the owners. The transfer is made by a form of endorsement on the back of the certificate. The men subscribing in this way become responsible for the good management of the business, and are obliged to act according to the laws of the state in which the company is organized. Usually they are responsible individually for the liabilities if the concern should become bankrupt. Every person who subscribes owns a part of the business and is called a *shareholder*. All the shareholders must meet together, and out of their number they choose a certain number of directors. The directors choose a president and other necessary officers and fix the amount of salary which shall be paid such officers for their work. As a rule directors have no salaries attached to their positions. A regular meeting of all the shareholders is held at least once a year to elect the directors and hear the reports of the officers. It is necessary to file a statement of resources and liabilities each year with the State Secretary.

Capital Stock Increased.

The capital stock of a concern may be increased or diminished by a vote of the majority of the stockholders representing a majority of the stock.

Preferred Stock.

The preferred stock of a corporation is given to secure some obligation of the company and upon it dividends are declared in preference to common stock. That is to say, if a man holds a share of preferred stock he will receive interest thereon out of the profits of the business before such profits are given in the form of dividends to shareholders generally.

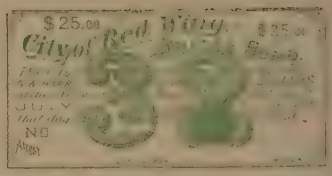
Dividends.

The directors of a company after paying the expenses and laying by a certain amount for contingencies, divide the profits among the shareholders. These profits are called dividends, and in well managed companies the dividends which are declared quarterly, semi annually, or annually usually amount to good interest on the shareholder's investment.

Surplus Fund.

It is not customary to pay a larger dividend than good interest on the investment. In some states some classes of corporations are not

$25.00
City of Red Wing.
$25.00.
BRIDGE BOND.
DOLLARS
NO.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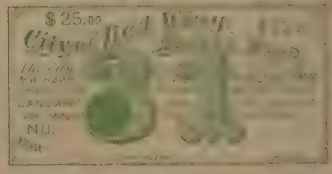
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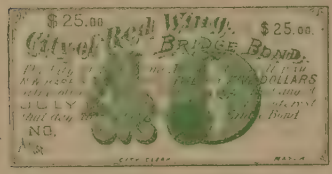
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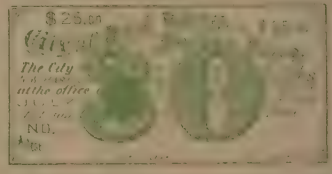
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The City
NO.

$25.00
City of Red Wing.
$25.00.
BRIDGE BOND.
DOLLARS
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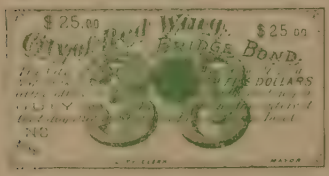
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BRIDGE BOND.
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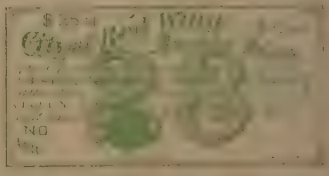
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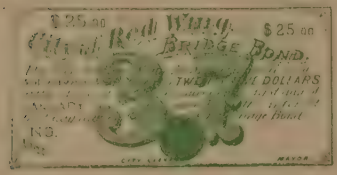
$25.00
City of Red Wing.
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BRIDGE BOND.
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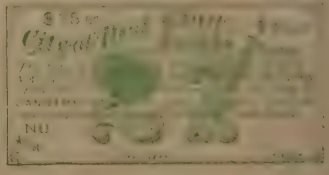
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permitted to declare dividends larger than a fixed amount. The profits remaining after expenses and dividends are paid are credited to what is called a *surplus fund*. This fund is the property of the shareholders and is usually invested in good securities.

Treasury Stock.

It often occurs that a new company finds it necessary to set aside a certain number of shares to be sold from time to time to secure working capital. Such stock is held in the treasury until it is needed and is called *treasury stock*.

Guaranteed Stock.

When a stock is issued, upon

which a certain dividend is guaranteed it is called *guaranteed stock.*

Watered Stock.

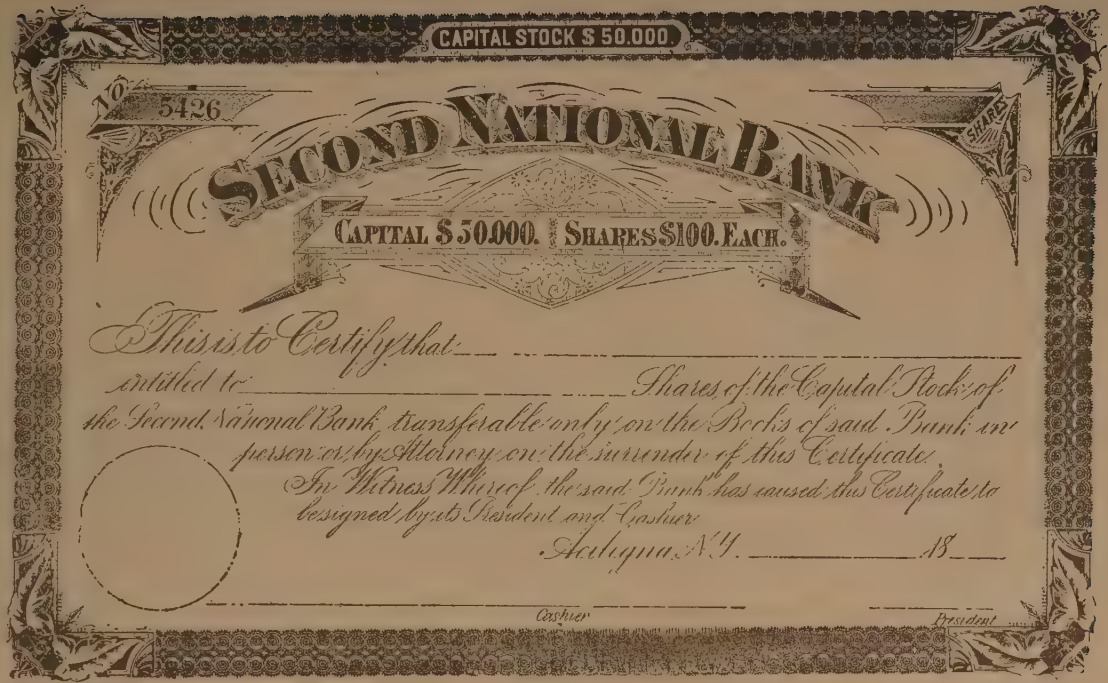
When stock is issued to the shareholders without increase of actual capital the stock is said to have been *watered.* A company may organize for say $5,000 and may want to increase to $50,000 without adding to the number of its shareholders. Each holder of *one* share will in this instance receive *nine* new shares, and in future instead of receiving a dividend on one share he will receive a dividend on ten shares.

Limited Liability Companies.

When the name *Limited* is affixed to a stock company's name, it signifies that each shareholder is individually liable to the creditors of the company for only the amount representing the value of the shares held by him. When the word *Limited* is not attached, it is understood that it is a *full* liability company in which each shareholder is individually liable to the creditors of the company. If a man should buy five shares in a *limited company* and the company should fail, for say $20,000, the creditors could compel him to pay only the amount subscribed, namely $500. In ordinary companies he could be compelled to pay the entire indebtedness if the amount could not be secured from the shareholders generally. Understand clearly that the name *Limited* printed after the name of a company, and which is required there by law, does not indicate in any way that the capital or credit of the company is limited.

Sale of Stock.

Stock is usually sold on certain explicit conditions, such as the paying of ten per cent. down and the balance at stated intervals. If the conditions which are agreed to by the shareholder are not met his stock is declared forfeited, or he can be sued in the same manner as upon any other contract. Some companies organize with the understanding that a certain percentage of the nominal value of the shares is to be paid at the time of subscribing, and that future payments are to be made at such times and in such amounts as the company may require. Under these conditions the stockholders are assessed whenever money is needed to pay the company's expenses. Such assessments are uniform on all stockholders.


CAPITAL STOCK $ 50.000

No. 5426

SHARES

SECOND NATIONAL BANK

CAPITAL $ 50.000. | SHARES $100. EACH.

This is to Certify that _____

entitled to _____ Shares of the Capital Stock of the Second National Bank, transferable only on the Books of said Bank in person or by Attorney on the surrender of this Certificate.

In Witness Whereof, the said Bank has caused this Certificate to be signed by its President and Cashier

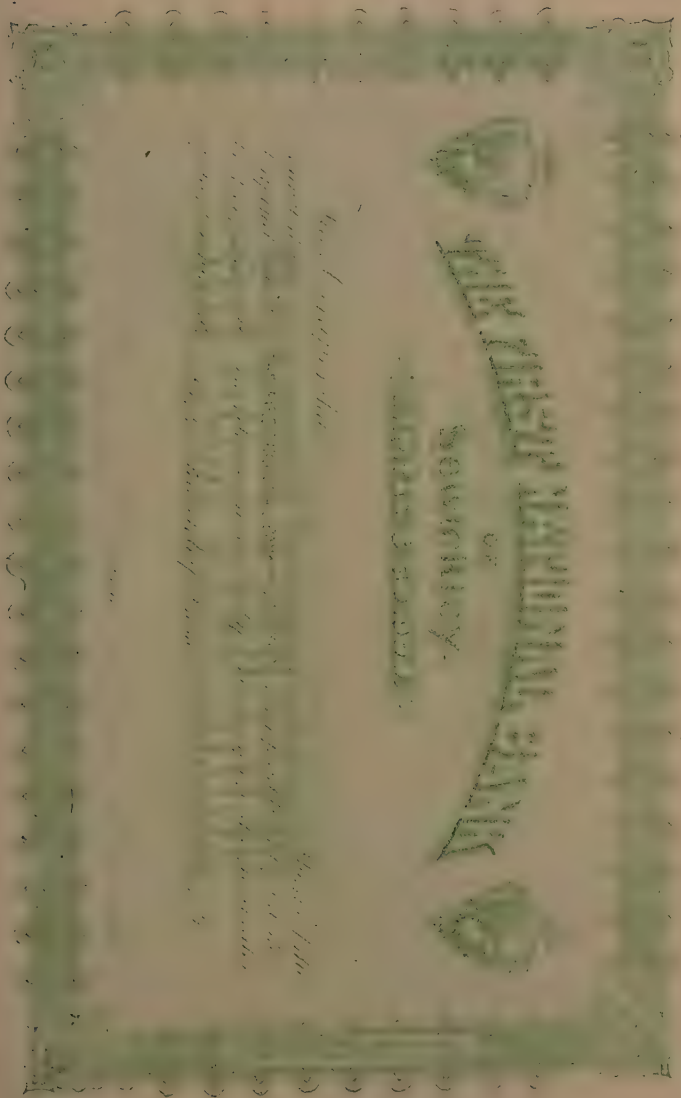
Watkins N.Y. _____ 18__

_____ Cashier

_____ President

Corporations.

A corporation is a body consisting usually of several persons, empowered by law to act as one individual, and continued by a succession of members. Public corporations are those which are created exclusively for the public interest, as cities, towns, counties, state universities, hospitals, etc. Private corporations are created wholly or in part for the private emolument of the members, as railroad companies, banks, manufacturing companies, etc. Corporate bodies whose members at discretion fill by appointment all vacancies occurring in their membership, are sometimes called close corporations. In the United States the power to be a corporation is a franchise which can only exist through the legislature. There are two distinct methods in which corporations may be called into being: first, by a specific grant of the franchise to the members; and second, by a general grant, which becomes operative in favor of particular persons when they organize for the purpose of availing themselves of its provisions. When the specific grant is made, it is called a *charter:* it specifies the grantees, indicates the purpose to be subserved by the corporation, and the powers and privileges it shall possess to that end, perhaps imposes special liabilities and penalties for abuse, and makes provision for perpetual succession of members by a transfer of interests, or by elections or appointments to fill vacancies. In the case of private corporations the charter must be accepted by the members, since corporate powers cannot be forced upon them against their will; but the charter is sufficiently accepted by their acting under it. Public corporations, on the other hand, may be organized at the legislative discretion, without consulting the pleasure of the people incorporated. When special charters are not granted, a general law is passed, under which individuals may voluntarily associate, and, by complying with the provisions of the law, take to their organization corporate powers. In some of the states private corporations are not suffered to be created otherwise than under general laws, and in others, public corporations are created in the same way. A corporation must have a name, by which it shall be known in law and in the transaction of its business. The name is given to it in its charter or articles of association, and must be adhered to, though doubtless a corporation might render itself liable on engagements assumed in another name which it had used as its own, and it is possible for a corporation to have two names, as has sometimes been the case with municipal bodies, which are permitted to make contracts or bring suits in one name for one purpose, and in another name for an-



other. In municipal corporations in the United States the members are the citizens; the number is indefinite; one ceases to be a member when he moves from the town or city, while every new resident becomes a member when by law he becomes entitled to the privileges of local citizenship. In corporations created for the emolument of their members, interests are represented by shares, which may be transferred by their owners, and the assignee becomes entitled to the rights of membership when the transfer is recorded; and if the owner dies, his personal representative becomes a member for the time being. In such corporations also, shares may be sold in satisfaction of debts against their owners. The necessity for the use of the corporate name in the transaction of business, flows from the fact that, in corporate affairs, the law knows the corporation as an individual, and takes no notice of the constituent members. It was formerly supposed that a corporation could transact no business except under its corporate seal; but now it is only in the execution of solemn instruments, such as deeds, bonds, mortgages, etc., that the seal is commonly used. Most of the business of a corporation is necessarily carried on with as little formality as if transacted by an individual. The laws which corporations may make for their own government are made under the several heads of by-laws, ordinances, rules and regulations; and they are made by the governing body for any object not foreign to the corporate purposes. A municipal corporation, for example, makes ordinances for the cleaning and lighting of its streets, for the government of its police force, for the beautifying and regulation of its parks, for the supply of water to its citizens, and for the punishment of all breaches of its regulations. A railway corporation establishes regulations for signals, for the running of trains, for freight connections, for the conduct of its passengers, and for hundreds of other things. But such by-laws and regulations must be in harmony with the charter of the corporation and with the general law of the land. For instance, a municipal corporation could not enforce a by-law forbidding the use of its streets by others than its own citizens, because by general law all highways are open to the common use of all the people. Again, a railway corporation could not make a rule that it would carry goods for one class of persons only, because, as a common carrier the law requires that it carry impartially for all. A railway company may properly and justly require every passenger to remain upon the car until it is brought to a stand, because prudence and safety require this; but a regulation that no one shall leave his seat after taking it until he leaves it to pass from the car would have no such

ORGANIZED UNDER THE LAWS OF THE STATE OF PENNSYLVANIA.

No. Shares

THE HARRISBURG

VENTILATED BARREL COMPANY

CAPITAL $ 37,500.

SHARES $ 50 EACH.

This is to Certify that _____

is entitled to _____ Shares of the Capital Stock of

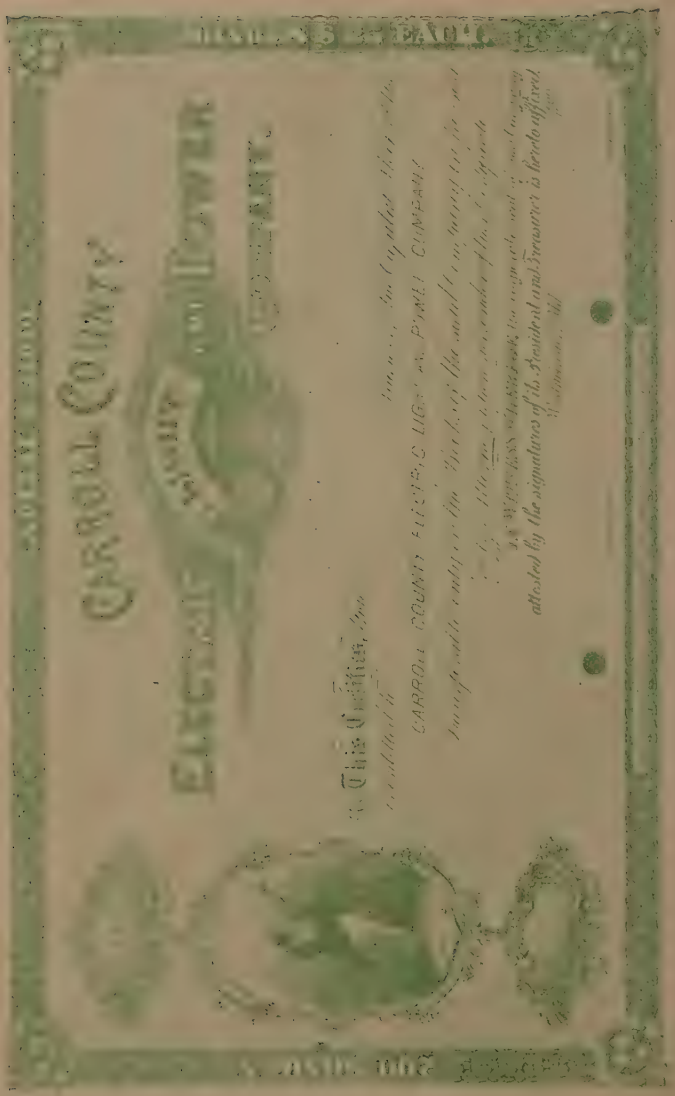
The Harrisburg Ventilated Barrel Company, transferable only on the Books of the Company in person or by Attorney on the surrender of this Certificate

Witness the Corporate seal of the said Company and the signatures of the President and the Secretary. Harrisburg, Pa. _____ 189__

_____ Secretary

_____ President.

FULL PAID. NON-ASSESSABLE.


CARROLL COUNTY
ELECTRIC LIGHT AND POWER
CARROLL COUNTY ELECTRIC LIGHT AND POWER COMPANY

considerations to support it. As a general rule private corporations organized under the laws of one state are permitted to do business in other states. It is sometimes to the interest of a stock company to organize under the laws of one state for the purpose of doing business in another. For instance there are many companies chartered under the laws of Maine and with headquarters in Boston. The Massachusetts laws require that a large portion of the capital be paid up when the company is organized, while a company with twenty-five dollars can organize in Maine for $100,000 and not a single member be a resident of the state. So it is that many large companies doing business in New York and Philadelphia are organized under the laws of New Jersey. A corporation ceases to exist when it was limited by its charter to a certain period of time, and that period has elapsed. A corporation may be terminated by a repeal of its charter when a right to repeal was reserved. A corporation may make an assignment just as may an individual. If all the members die the property interests pass to the rightful heirs and under ordinary conditions the corporation still exists. It is usual to provide for the winding up of corporations which are found to be insolvent. Persons wishing to form a corporation or stock company should study carefully the State laws under which they intend to organize.

Bonds.

If a railroad or a steamship company or a city or any other corporation desire to borrow money, instruments of credit called *bonds* are issued. Bonds bear almost the same relation to the resources of a corporation that mortgages do to real estate. A bond means something that binds. Bonds are usually issued for a period of years and have coupons attached which are to be cut off and presented for payment of interest at regular intervals. The portion of the earnings of a corporation is usually set aside each year as a *sinking fund* to meet the bonds when they mature. Thus you see that a bondholder runs less risk than a stockholder, for the corporation is bound to pay interest on its bonds but is not obliged to pay dividends on its stock. On the other hand, if the concern is very successful, the shareholders may receive more money than the bondholders; for no matter how large the profits are, only the promised rate of interest is paid on the bonds, whereas the dividends paid will grow larger as the earnings increase. A bond is evidence of debt, specifying the interest, and stating when the principal shall be paid; a certificate of stock is evidence that the owner is a

part-owner in the company, not a creditor of the company, and having no right to regain his money except by the sale of the stock, or the winding up of the company's business. The name *debentures* is given to a form of municipal bond in general use. Nearly all the large sums of money used by states and cities for the building of government institutions, bridges, canals, etc., are raised through the issue of bonds which are sold, usually at a price a little below par, to large financial institutions, banks, and insurance companies. Generally speaking such bonds are considered good *securities* and are marketable anywhere.

Corporation Franchise.

A *franchise* is a right granted by the state to individuals or to corporations. The franchise of a railroad company is the right to operate its road. Such franchise has a value entirely distinct from the value of the plant or the ordinary property of the corporation. When a corporation sells its property, the buyer should expressly bargain for the franchise. Frequently a corporation is not allowed to sell its franchise except by consent of the state.

Liability of Stockholders.

The stockholders of a *corporation* are usually not liable for its debts beyond the amount of the stock held by them. The members of a *joint-stock company* are liable as partners. The holders of national bank stocks, in case of the failure of the bank, are liable to double the amount of the face value of their stock; that is, each stockholder, in addition to the loss of his stock, may be assessed to pay all the debts of the bank, up to an amount equal to his stock. There is no personal liability as in the case of partnerships or joint-stock companies. An instance is given of a gentlemen in Boston who had $30,000 invested in the stock of a national bank of that city. The bank failed. He lost his entire $30,000 and was compelled to pay an additional $30,000. That is, the failure reduced his property $60,000.

Arbitrage.

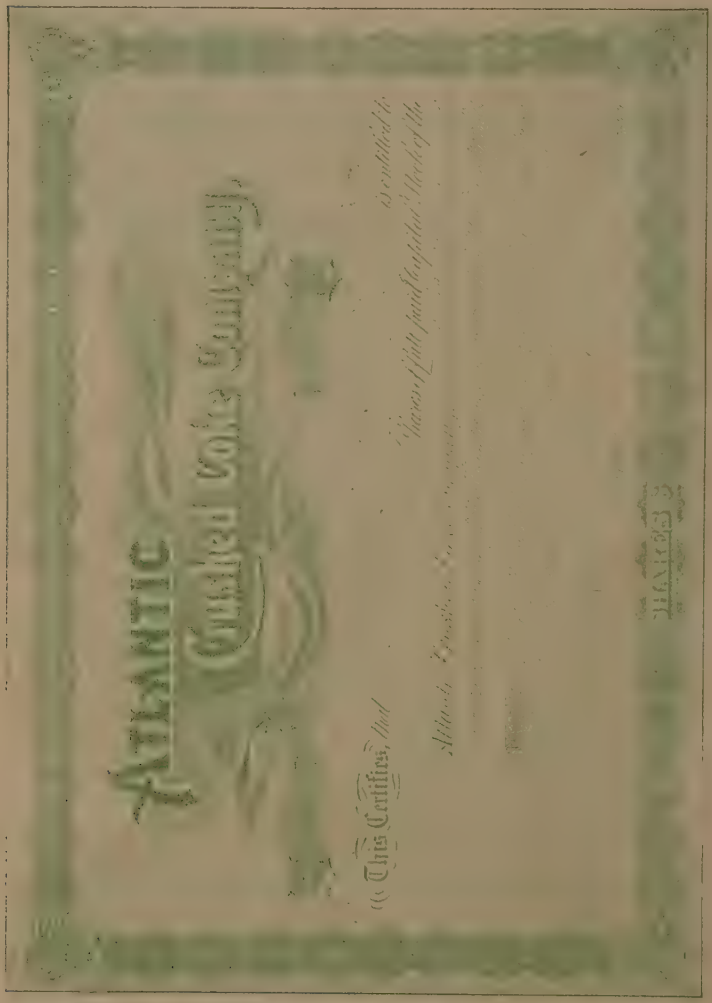
This name is given to stocks and shares bought in one market and sold in another; as shares bought on the London market and sold in New York. This class of business is in the hands of brokers and is carried on by telegraph.

Advantages over Partnerships.

The following are given as a few of the advantages which are claimed for corporations and joint-stock companies over partnerships:

1. Union of capital without the active service of the investors 2. Better facilities for borrowing. It is a common thing for a partnership to be changed to a corporation for the express purpose of raising money by the issue of bonds or stock. 3. Limited agency of directors. A partner may pledge and sell the partnership property, may buy goods on account of the partnership, may borrow money and contract debts in the name and on the account of the partnership. These powers cannot be limited by agreement between the partners so as to bind outsiders. Accordingly, a person dealing with a partner is entitled, unless he has express notice to the contrary, to assume that the partnership has the usual powers. The directors of a company are in a very different position. They are *special* agents, and have only such powers as are given to them by regulations of the company. The power of thus effectually limiting the authority of the acting partners is of great value, and constitutes one of the chief advantages which a company has over a partnership. 4. The continuous existence of a company. Where a man is possessed of a profitable business he very commonly wishes to provide for its continuance in the event of his death. If he proposes to bequeath the concern to his son or some other relative absolutely, there is no difficulty; but it may be that his sons are under age or are not anxious to engage in the business; in such cases the ordinary course, if the concern is not converted into a company, is to bequeath the business, with the capital employed in it, to trustees who are directed to carry it on so as to effect the testator's wishes. But in these work-a-day times it is very difficult to find trustees willing to undertake such trusts. If, however, the business has been changed to a private company these difficulties disappear. All the shares in the company with the exception of a very few, are issued to the former owner as fully paid up and he becomes managing director. By his will the shares are bequeathed to trustees, who become or appoint directors. Upon the death of the testator the business will go on, and in due course the shares may be sold, distributed, or otherwise disposed of as his will directs. 5. In the case of a partnership the title of the property held may be affected by the death or bankruptcy of one of the partners, but in the case of a company the property is vested in the company as a body corporate, and no changes among its members affect the title. 6. Contracts with a partnership are in law regarded as contracts with the members of it, whereas contracts with a company are not contracts with individual shareholders. 7. New shareholders are admitted much more easily than are new partners. 8. A retiring

partner is still liable for existing debts; a shareholder can retire absolutely by selling his stock and having it legally transferred.


ATLANTIC
Quicksilver Mining Company
This Certifies, that
Transferable on the Books of the Company by the Holder hereof in Person or by Attorney
Witness the Seal of the Company and the Signatures of its Duly Authorized Officers
SHARES

Illustrating why Companies are Formed.

It may be helpful to the student to give some instances of the many

causes which lead to the formation of stock companies and corporations:

1. A firm consists of several members, each of whom has put together some private means which he is desirous of freeing from the risk of trade. To effect this they convert the business into a stock company; they become the sole directors of the company; and they receive paid-up shares in substitution for their interests in the business. Henceforth their assets outside the business are under certain conditions free from risk.

2. A firm consists of several members, one of whom is entitled to the greater part of the capital, and has also large private means. He is disposed to retire on the fortune he has accumulated. If his liability could be limited, he would be willing to leave part of his capital in the business, and to assume the position of a sleeping partner. The only way in which this can be effected is by converting the business into a limited liability company.

3. The owner of a profitable business dies. There are competent managers, but the owner's sons are not inclined to devote themselves to the concern, or to incur the unlimited liability involved in carrying it on through managers. Accordingly, they convert the business into a private company.

4. A capitalist is willing to supply a person or a firm engaged in trade with additional capital in consideration of a share in the profits, but does not wish to incur the liabilities of partnership. He therefore stipulates that the business shall be converted into a limited company. He then brings in the additional capital by paying cash for the shares of the company.

5. A, B, and C are entitled to a valuable business. By reasons of a temporary lock-up of funds or otherwise they find it necessary to consult their principal creditors. Bankruptcy, with its grasping officialism and discredit, would be disastrous to all concerned, and more especially to the creditors. Accordingly, the concern is converted into a company, the smaller creditors are paid off in full, and the principal creditors all take debentures for their debts, and are given paramount control in the management of the company. The concern is thus placed on its legs, and as soon as practicable the debentures are cleared off, and meantime the creditors have the fullest security that it is possible to give them, and are able in fact to manage their own affairs and protect their own interests.

6. A, B, and C desire to start a newspaper, or to supply a town

wit water, or to build a theatre, or to provide swimming baths, or to erect a hotel. They consider it necessary to unite their capital. Accordingly they form a private company and each becomes a director, and further funds, if wanted, are raised by the issue of additional stock or first mortgage bonds.

7. A has a patent for an invention, but no capital. The utility of the invention is fairly obvious, but it requires to be more thoroughly tested, and a large expense must be incurred in putting it on the market. B, C, and D agree to put up the necessary capital for a share in the profits and to carry out their plans properly they find it necessary to form a stock company.

The foregoing are simple illustrations. There are thousands of reasons why companies and corporations are formed. In four cases out of five the major reason is the need of the larger working capital which can be more easily secured by the formation of a chartered concern.

Investing.

With the growth of wealth, we find increasing numbers of persons who want to invest their means in good securities. To do this successfully and safely is a very difficult question. It is even more difficult to keep money profitably employed than to make it. Changes and innovations are of continual occurrence. Not only are new securities constantly coming upon the market, but new subjects as a basis of their production are industriously sought after. Every newly-discovered force or process in mechanics means the appearance of another detachment of paper securities. The war of the rebellion popularized the *coupon bond*, in consequence of its adoption by the government, and made it the favorite form of investment paper. Railroads and other corporations soon availed themselves of the confidence which that species of paper inspired, and states, cities, and counties were soon flooding the country with obligations carrying long coupon attachments. Many persons have purchased and paid good prices for mortgage coupon bonds, giving them no control over their security, who would have rejected share-certificates standing for an equal interest in the property pledged, and giving them the right to participate in its management, with the possibility of a greater return for their money. Many of the states through careless legislation have permitted corporations to decide for themselves the amounts of obligations they might put out, and the privilege has been very much abused. We now have stocks and

bonds upon the market representing nearly all conceivable kinds of property—telegraph and telephone companies, mining companies, cattle ranches, grain farms, water-works, canals, bridges, oil and gas wells, electric lighting, trolley companies, factories and mills, patent rights, steamboat lines, apartment houses, etc. Not only are properties of many kinds used to issue bonds upon, but many kinds of bonds are often issued upon the same properties. Thus we find among our railroads not only first, second, and third mortgages, but income bonds, convertible bonds, consolidated bonds, redemption bonds, renewal bonds, terminal bonds, divisional bonds, sinking-fund bonds, collateral trust bonds, equipment bonds, etc., until they lap and overlap in seemingly endless confusion. One issue of bonds is sometimes made the basis of other issues. Some one has said that there never was a time in the history of the world when it was so easy to invest money—and to lose it. Of the securities that are offered with first-class recommendations, it is probable that about one-third are actually good, one-third have some value, and one-third are practically worthless. In making investments, the first and main thing to be studied is safety. Never buy a security of any kind without having read it. Do not buy what are commonly known as *cheap securities*. Do not rely solely upon the advice of a broker. He may have personal interest to serve. By far the greater number of losses to investors has been in securities purchased exclusively on the recommendation of interested commission men. It is a mistake to give preference to *listed* securities—that is, those reported on the stock exchange lists. Stocks are too often listed simply for speculative purposes, and the price represents not so much the value of the property as the pitch of the speculation at the time. Securities, in the long run, must stand upon their merits. As a rule, the best time for an experienced investor to buy, is when others are unloading.

U. S. Government Bonds.

At different times the United States government has issued bonds to relieve the treasury. No better investments are offered. They draw interest at rates from 3 to 4 per cent., and late issues have been sold at prices slightly above par. These bonds are absolutely safe and are always marketable. It is estimated that the civilized nations of the globe now owe, without including local obligations, not less than thirty billions of dollars, a sum equal to a mortage of $800 on each square mile of their territory.

State Bonds.

History has shown that state bonds—bonds issued by the states for local enterprises and improvements, such as government buildings,

schools, hospitals, etc.—have not always proven profitable as investments. As a rule, however, the bonds of such states as Massachusetts,

New York, Pennsylvania, etc., rank next to those of the Federal government as safe securities.

Municipal Bonds.

These are issued by cities and other municipalities to raise money for local improvements, such as city buildings, street paving, waterworks, etc. They have an important element of security that state bonds do not possess. Their collection can be legally enforced, but in buying them, it is very important that all points affecting their validity should be carefully inquired into. If proper precautions are taken by buyers, municipal securities may be considered among our safest and most remunerative investments.

Railroad Mortgages.

As our railways, with few exceptions, are valuable and productive properties, they furnish an excellent security for interest-bearing paper, provided always that they are properly managed and not overburdened with debt. Railroads are now built for the purpose of profit. Railroading is an industry just as is the raising of cattle, the growing of grain, or the manufacture of machinery. When a new railway enterprise is undertaken, its promoters expect to make the road not only supply funds for its own construction, but to give them working capital in addition. This is accomplished by mortgaging the property to that extent that the bonds can be sold for a larger sum than the actual cost of the road. Default in the payment of interest throws the road into the hands of a receiver. The securities immediately fall in value. They are perhaps bought up by a syndicate of crafty speculators who are permitted to reorganize the road and its management. This is the history of many of our roads. There are exceptional cases, of course, but the investor should be familiar with the facts before buying railroad mortgages.

Railroad Stocks.

These are of such varied character that it is impossible here to make more than general statements. Many of our railroad stocks bring prices far above par and pay liberal interest on investments. Some of them are so profitable that they are really not on the market and cannot easily be bought. Others represent roads loaded down with mortgages and other obligations so heavy as to make the stock really a liability

rather than a resource to its owner. The stock quotations represent in a general way the comparative value of these securities.

Miscellaneous Stocks.

To make a profitable investment in stocks the buyer must anticipate the future. A mill that may be working day and night this year may be obliged to shut down entirely next year. A business which is open to public competition must take its chances on its future success. The greater the earnings the more certain the competition. Many corporations owning monopolies by virtue of patent rights have made large fortunes, but there is always the possibility of new discovery. Electricity has succeeded gas; the telephone is competing with the telegraph; the trolley is cutting into the profits of railways. A good thing in stocks to-day does not necessarily mean a good thing next year.

Farm Mortgages.

Mortgages upon improved property, if properly graduated in amount, should be safe and profitable investments. The buyer, however, must exercise great care and good judgment. Should there be collusion between the loaning agent and the land owner, the money advanced may be largely in excess of the actual property value. Villages with less than a dozen houses are often the sites of investment companies doing business under pretentious names, and offering mortgage investments at interest rates which by the local conditions are impossible. One of the devices of these enterprising companies is to offer their own guarantees as to both principal and interest of all mortgages negotiated by them. The investor should be sure of two things: 1. the safety of the principal, 2. regularity in the payment of the interest. There is great danger of default from causes not anticipated by the farmer and over which he has no control.

Electric Railway Stock.

Of recent stock this is the most popular and in many instances the most profitable. The introduction of electric power has reduced the working expense one-half and in most instances has doubled the traffic without any reduction in fares. The buyer should make sure that the road is in a busy community able to sustain it, that its franchise will protect it from dangerous competition, and that the securities have been legally issued.

Substitution Securities.

There have recently been formed several large companies whose

business it is to issue bonds on the security of other bonds. The idea is similar to that of real estate title insurance. Such companies are supposed to have superior facilities for investigating securities. They purchase those which they consider good and at the best prices possible. These they deposit with some trust company or banking institution. With these bonds, which they buy, as their original property, they issue new bonds of their own which they sell to the public and which they guarantee. The differences in prices and in interest make up their profits.

Stock Quotations.

The stock quotations as given in our daily and financial papers are easily understood. In some instances the price offered by buyers and the price asked by sellers are both given. Bonds quoted for instance at 99@100 would indicate that if you wish to sell you can get 99 and if you wish to buy they will cost you 100.

Bottomry Bonds.

A *bottomry bond* is a kind of mortgage peculiar to shipping. It is a conveyance of the ship as security for advances made to the owner. If the ship is lost, the creditor loses his money, and has no claim against the owner personally. It is allowable for a loan made on such a bond to bear any rate of interest in excess of the legal rate. A vessel arriving in a foreign port may require repairs and supplies before she can proceed further on her voyage, and in occasions of this kind a bottomry bond is given. The owner or master pledges the keel or *bottom* of the ship, a part, in fact, for the whole, as a security.

General Mortgages.

A *mortgage* is a conveyance of property for the purpose of securing a debt, with the condition that if the debt is paid, the conveyance is to become void. A mortgage of personal property is called a *chattel mortgage*. A mortgage in form is really a deed of the land, with a special clause stating that the grant is not absolute, but only for the security of the debt. It is usual for the debtor at the time of executing the mortgage to also execute a bond or promissory note in favor of the creditor for the amount of the debt. This is called a *mortgage note*. When land is bought by one who is unable to pay for it in full, it is common for the purchaser to give back to the grantor a mortgage on the land conveyed for the unpaid balance. Mortgages are frequently given, in cases where there is a debt existing, to secure or indemnify

Equitable
DUCTION

the mortgagee against some liability which he may possibly incur on behalf or for the benefit of the mortgagor. For instance, where a man has endorsed another's note for the latter's accommodation, or gone on his bond as surety, the latter may execute to the former a *mortgage of indemnity*. When a married man makes a mortgage his wife should sign with him, in order to cut off her dower rights. The power of a corporation to make a mortgage is regulated by its charter or the general law under which it is organized. Religious corporations can mortgage only upon consent of the court. All mortgages must be recorded in the office of the register of deeds for the county in which the property is located. The object of recording is to give notice of the existence of the mortgage to any one who might wish to purchase the land, or to take a mortgage upon it. There may be several mortgages upon the same property. The first mortgagee is entitled to be paid in full first, then the second, and so on. The mortgagee may use his mortgage as security for loans or may assign it as he pleases. When the requirements of a mortgage are not met the holder has under certain conditions the right to *foreclose*, that is to advertise the property for sale, and within a time fixed by law, to sell it to satisfy the mortgage. It is usual for the mortgagor to insure the property for the benefit of the mortgagee

EXAMINATION QUESTIONS.

1. Enumerate some of the advantages to the general commerce of the country of our stock exchanges.

2. What are *Consols?* Explain the meaning of *U. S. 4s. 1907 Registered.*

3. If Pennsylvania R. R. stock is quoted in New York at 51 ¼ and in London at 54⅜, with exchange at 4.88, what is the *gold* advantage or disadvantage to a Londoner who buys 1,000 shares?

4. Distinguish between the two classes of dealers who generally operate on stock exchanges.

5. Give some particulars of the history and workings of the New York Stock Exchange.

6. What is meant by selling stocks or bonds in the *regular-way?*

7. What is a *ticker?* Give particulars of its use.

8. Distinguish between the use of the terms *bear* and *bull* in stock exchange manipulations. What is a *hedge?*

9. A broker buys 1,000 shares of stock for a customer and sells it again, what should his commission amount to?

10. Explain the meaning of *puts* and *calls.*

11. "The speculator usually trades on margins." What is meant by this?

12. What is the general commercial meaning of *securities?*

13. Explain the meaning of *mortgage bonds, debentures, certificates of stock, syndicate, substitution securities.*

14. Explain the difference between par and market value. Why do stocks and bonds vary in value?

15. What is the *dividend?* What is the usual commission of a stock broker?

16. Is the income from bonds affected by the prosperity of the business or corporation? Explain.

17. If I buy 3½ per cent. U. S. bonds at 113⅓, what rate of interest do I receive?

18. At what rate should stock paying annual dividends of 12 per cent. be bought to realize 7½ per cent. on investment?

19. Stock is originally bought at 37½. It is doubled by "watering" three times. It nows pays quarterly dividends of 4½ per cent. What per cent. does it pay on original investment? (*Ans.* 384 per cent.)

20. I bought 720 shares railroad stock at 71⅜ through a broker, on a margin of 10 per cent., and he sold for me at 74½. What per cent. profit did I make on my actual investment? (*Ans.* 44 per cent., nearly).

21. At what price must U. S. 3½'s. be bought to net 4 per cent.?

22. What is meant by the *settlement days* of English exchanges?

23. Explain the following stock exchange terms: *Pool, boom, panic, trading on the curb, a wash sale, buyer 3, bucket-shops.*

24. Distinguish between selling *dividend-on* and selling *ex-dividend.*

25. Discuss in a general way the business of brokers in large cities. Why do merchants and manufacturers find it to their advantage to employ brokers?

26. Give the successive and necessary steps in the formation of a joint stock company.

27. Why are companies who exist and belong in one State organized under the laws of another State?

28. To what extent are purchasers of shares of stock responsible for the liabilities of the concern represented?

29. Explain very fully the difference as to resource and liability between a bondholder and a stockholder.

30. How can the stock of a company or corporation be increased?

31. Explain clearly the difference between a stock company and a corporation.

32. What is the effect of an arrangement between partners as to sharing the liabilities of a concern? How about share-owners in this particular?

33. How may a stock company be dissolved?

34. What is the difference between a voluntary association such as a society or club and a stock company?

35. Explain what is meant by *preferred stock*. What is *treasury stock*?

36. In reports of banks, insurance companies, and other large corporations we notice that large sums of money are classed as *surplus fund*. How is this fund formed, to whom does it belong, and why is it held by the corporations?

37. Explain very fully the meaning of *Limited* when it forms part of the legal title of a company.

38. A invests $10,000 in the stock of a manufacturing company; B invests $10,000 in the stock of a national bank; C invests $10,000 in the stock of a limited liability publishing company. All three concerns fail and their existing assets apart from the liability of the stockholders is 10 cents on the dollar. How much will A, B, and C lose respectively?

39. Can A transfer a share of stock to B? Give full particulars.

40. Explain clearly the two distinct methods by which corporations may be called into being. Can the members of a corporation be indefinite as to number? Explain. Can they be indefinite as to person?

41. Could a municipal corporation enforce a by-law forbidding the use of its streets to others than its own citizens? Why?

42. If all the members of a corporation die, to whom will the property interests pass? Will the corporation still exist?

43. What is the purpose of the coupons which we find attached to bonds?

44. Distinguish between the franchise of a railroad and that of an individual.

45. What is *arbitrage*?

46. Give fully some of the advantages which stock companies and corporations have over partnerships.

47. Discuss the subject of *investments* showing the investors' chances of gain or liability to loss.

48. The United States government makes and issues money and

has its vaults well filled with coin and bullion. Why is it necessary to issue government bonds?

49. What provision is usually made for the redemption of municipal bonds which have a long period to run?

50. Is it legal to sell shares of stock and issue mortgage bonds upon the same property? What relationship do they bear one to the other?

51. What is meant when we say that a certain railway is in the hands of a receiver?

Transportation of Mail, Money, and Merchandise.

History of Transportation.

The Romans had an admirable system of roads, and a highway legislation not unlike that now prevailing in France. But in the middle ages both the roads and the law were allowed to decay. As the central governments of Europe grew in power, from the sixteenth to the eighteenth century, they also laid claims to rights over the roads; first in the form of a right to levy tolls; and later in undertaking to build roads, and maintain them under their own control. Throughout the continent the road taxes were oppressive and the highways extremely bad. A thorough reform was instituted in France by revolutionary legislation which provided for roads free from tolls, and supported by the nation. Similar legislation was carried out during the same period in other parts of the continent. In England the course of events had been different. The roads had always been recognized as the king's highways. The experiment of tolls was cautiously tried. Turnpike trusts were introduced at the beginning of the last century with tolerable success. The early American system was modeled upon that of England—especially so in New England. The development of the canal system in England and America was almost simultaneous with that of turnpike roads. In internal navigation France took the lead while in railroad building England took the lead. Competition has increased greatly the speed and reduced materially the expense of transportation. By the study of the prevailing winds, the speed of sailing vessels on many frequented routes was nearly doubled, and the expense of carriage

thereby greatly diminished. Fifty years of constant improvement in postal facilities have been marked by a reduction of postal charges to less than one-fifth what they were at the beginning. There has been the same kind of improvement and reduction in the steamship service. When ocean steamships were first introduced, it was not supposed that they could ever compete with sail for the carriage of ordinary freight, even on the most frequented routes. Railroads soon after their introduction, proved themselves more than a match for any competition from the old system of hauling in wagons; and transportation has now reached such perfection that the one cent per bushel which it costs the farmer to haul wheat a mile by wagon, is a higher rate than he has to pay per ton per mile by railroad. Or, to put the same results in another way, in most of the wheat regions it would not pay to grow grain which had to be hauled 25 miles by wagon; in some places the limit of wagon hauling is as low as ten miles.

Economic Results of Improved Means of Transportation.

The successive railroad improvements, both in engineering and in management, culminating in the wonderful substitution of steel rails for iron, and the enormously increased loads thus rendered possible, have produced such astonishing results, that it is not safe to predict the possibilities of the near future. The most immediate effect of cheapened transportation is to increase the distance at which it is possible for producer and consumer to deal with each other. To the producer it offers a wider market and to the consumer more varied sources of supply. On the whole, cheapened transportation is more uniformly beneficial to the consumer; its temporary advantage to the producer very often leads to overproduction. It has the effect also of bringing about nearly uniform prices the world over. In the case of less bulky manufactured products, these differences of price almost disappear, except as they are due to artificial obstructions. The time was when nearness to market was of the greatest possible advantage. At the present time a farmer can raise his celery in Michigan or his beets in Dakota and market them in New York city about as easily as though he lived on Long Island. It is no longer location which determines the business to be carried on in a particular spot, but natural advantages more or less independent of location. These changes have had a wonderful influence upon international relations. Even the barriers raised by high protective tariffs hardly avail to counteract the effects of reduced transportation. It is the railroad or the steamboat which determines where a new business

shall be developed, quite as often as the policy of a government. The grant of special rates and privileges to shippers is nowadays the most efficient kind of protection. It is this quickening and cheapening of transportation that have given such stimulus in the present day to the growth of large cities. It enables them to draw cheap food from a far larger territory; and it causes business to locate where the widest business connection is to be had, rather than where the goods or raw materials are most easily procured. With this growth of city life, comes the increased gain of large dealers at the expense of the small; with it comes organized speculation, and its attendant results, good and evil; and with it comes the development of enormous wealth in the hands of a few. It is because these indirect results are so far-reaching that the question of government control of transportation agencies has reached its present importance.

Transportation Rates.

As a general rule transportation rates are lower in Europe than in America. Transportation agencies in private hands will of course be managed on business principles, that is, they will charge all that the traffic will bear. It would seem, at first sight, as if non-competitive points were thus left entirely at the mercy of railroad managers. Practically, however, this danger is checked by two important limitations. In the first place, the competition of different localities in the same market is such that if one railroad charges rates arbitrarily higher than its competitors, it renders it impossible for the localities along its route to ship goods at a profit, and will thus quickly destroy its own traffic; secondly, exorbitant rates may induce the building of a parallel railroad; and however ineffective such roads generally prove after they are built, the prospect of one in the future has the tendency to keep rates down. The dangerous kind of discrimination, and one which cannot be too strongly reprehended, is that which makes special rates for different individuals, doing the same kind of business in nearly the same place. The rates of transportation in America are partly regulated by state and federal legislation, but more largely by mutual arrangement of transportation companies.

Freight Companies.

Prior to the completion of the organization of trunk or through lines, freight was compelled to break bulk and suffer trans-shipment at the end of each line, where a new corporation took up the traffic and

carried it beyond. To prevent this breaking of bulk, and to expedite the carriage of freight, fast freight lines on separate capitalization were organized, at first by the managers of the railways themselves owning or leasing their freight cars, and then made profitable by special arrangements with the railways readily enough secured, because of the fact that the railway officials themselves were largely interested in the fast freight lines. Notwithstanding the fact that many of the state legislatures have made laws to regulate the carrying trade, it is generally known that many large business firms, the leviathans of modern business, can and do dictate their own terms between rival corporations, while small concerns are compelled to accept the best terms they can get. Special contracts covering long periods of time are made every day with heavy shippers, under which the common carrier, whose first duty it is to serve all equally, gives to certain houses a practical control of the markets. The names of the leading freight companies such as *Merchants' Despatch, Union Line*, etc., are familiar to every one.

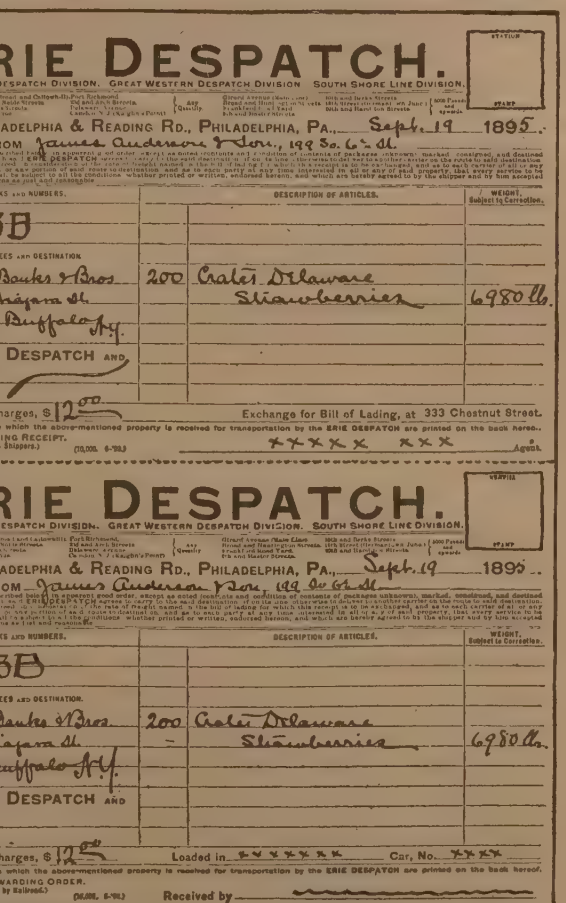
Common Carrier.

In a legal sense a common carrier is one whose regular business is to carry articles of personal property from place to place for the public. Expresses, stages, railroads, canal boats, steamboats, teamsters, ferries, etc., are instances of common carriers. A common carrier must carry for every one who desires to employ him and is ready to pay him his reasonable charge, so long as he has accommodations, and holds himself out to carry the kind of articles offered. It is the carrier's duty to load the goods carefully and to carry them safely and without unreasonable delay, and he is liable under certain conditions for damage or loss while in his possession.

A Bill of Lading.

A bill of lading is an acknowledgment by a transportation company of the receipt of goods specified, and contracts for their delivery at a certain place, under conditions stated thereon upon payment of freight and expenses. Bills of lading are negotiable and may be transferred by endorsement, but are of no value apart from the goods to which they give title. A bill of lading goes with certain *named* goods and cannot be transferred to other goods even though of precisely the same kind and price. Marine bills of lading are usually made in triplicate; one is kept by the shipper, another by the vessel, and the third is sent by mail to the person to receive the goods. Original re

ceipts, stating marks and quantities of goods, go with each separate lot to the freight sheds or vessel, and these are summed up in a formal bill of lading, for which they are exchanged, when all the cases or bundles



ERIE DESPATCH.

ERIE & PACIFIC DESPATCH DIVISION. GREAT WESTERN DESPATCH DIVISION. SOUTH SHORE LINE DIVISION.

PHILADELPHIA & READING RD., PHILADELPHIA, PA., Sept. 19 1895.

RECEIVED FROM James Anderson & Son., 199 So. 6th St.

MARKS AND NUMBERS. | DESCRIPTION OF ARTICLES. | WEIGHT, Subject to Correction.

◊3B

CONSIGNEES AND DESTINATION.

Burns, Banks & Bros. 200 Crates Delaware Strawberries 6480 lbs.
91 Niagara St.
Buffalo N.Y.

VIA ERIE DESPATCH AND

Advanced Charges, $ 12.00 Exchange for Bill of Lading, at 333 Chestnut Street.

The Conditions upon which the above-mentioned property is received for transportation by the ERIE DESPATCH are printed on the back hereof.

ORIGINAL—SHIPPING RECEIPT. (To be returned to Shippers.) (10,000. 6-'95.)

XXXXX XXX Agent.

ERIE DESPATCH.

ERIE & PACIFIC DESPATCH DIVISION. GREAT WESTERN DESPATCH DIVISION. SOUTH SHORE LINE DIVISION.

PHILADELPHIA & READING RD., PHILADELPHIA, PA., Sept. 19 1895.

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Burns, Banks & Bros. 200 Crates Delaware Strawberries 6480 lbs.
91 Niagara St.
Buffalo N.Y.

VIA ERIE DESPATCH AND

Advanced Charges, $ 12.00 Loaded in XXXXXX Car, No. XXXX

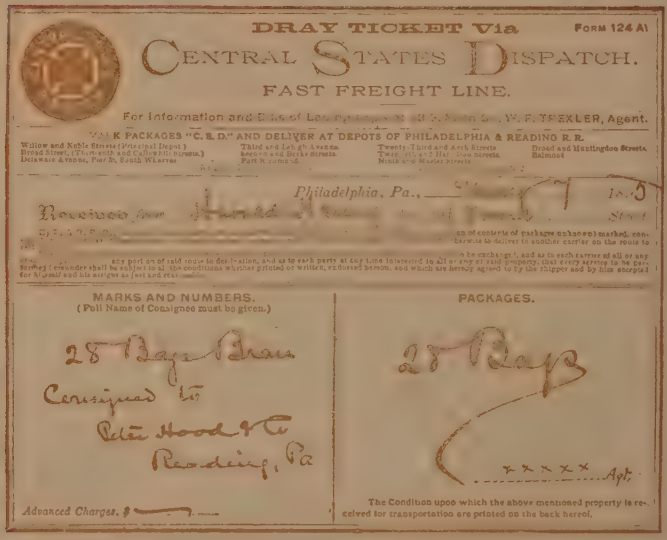
The Conditions upon which the above-mentioned property is received for transportation by the ERIE DESPATCH are printed on the back hereof.

DUPLICATE.—FORWARDING ORDER. (To be retained by Railroad.) (10,000. 6-'95.)

Received by

belonging to the particular shipment have been delivered. The part of the receipt marked invoice is kept by the receiver of the freight, and the other end is given to the drayman. In making small shipments, or

shipments at short distances it is not usual or necessary to make out a formal bill of lading. Of course when no bill of lading is made out the receipt should be preserved by the shipper. The full contract is usually printed on the receipt but it must be remembered that a receipt is not a negotiable instrument and cannot be used as security for money. The parties to a bill of lading are three, the shipper, the consignee, and the transportation company. The declaration of having received the goods in good order and condition and the consequent obligation, subsequently expressed, of delivering them in like good order and condition, is sensibly lessened in its importance by the additional clause now



DRAY TICKET Via — FORM 124 A1

CENTRAL STATES DISPATCH.

FAST FREIGHT LINE.

For information and Rates of Lo[illegible] W. F. TREXLER, Agent.

[illegible] K PACKAGES "C. B. D." AND DELIVER AT DEPOTS OF PHILADELPHIA & READING R. R.

Willow and Noble Streets (Principal Depot) — Third and Lehigh Avenue — Twenty-Third and Arch Streets — Broad and Huntingdon Streets.
Broad Street, (Thirteenth and Callowhill Streets.) — Berks and Buttonwood Streets — Twenty-first and Hamilton Streets — Belmont
Delaware Avenue, Pier N, South Wharves — Fifth and Master Streets — Ninth and Master Streets

Philadelphia, Pa., [illegible] 18[illegible]

Received from [illegible]

[illegible] contents of packages unknown) marked, consigned to [illegible] to deliver to another carrier on the route to [illegible]

[illegible] any part or all of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the conditions whether printed or written, expressed herein, and which are hereby agreed to by the shipper and by him accepted for himself and his assigns as fair and reasonable.

MARKS AND NUMBERS. (Poll Name of Consignee must be given.)

28 Bags Bran
Consigned to
Peter Hood & Co
Reading, Pa

PACKAGES.

28 Bags

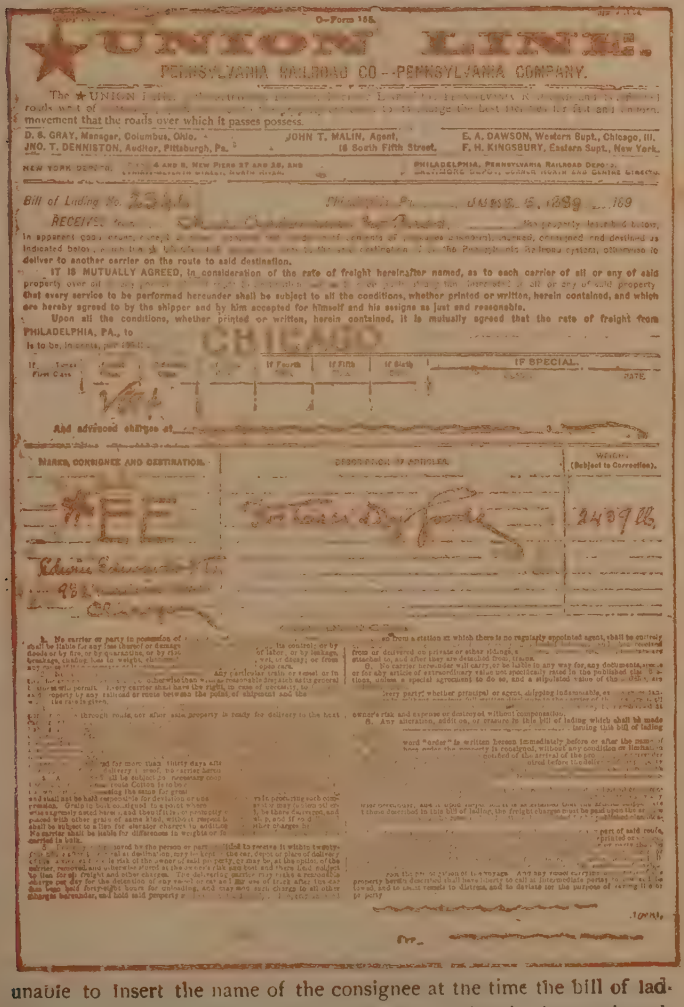
[illegible] Apt.

Advanced Charges, $ [illegible]

The Condition upon which the above mentioned property is received for transportation are printed on the back hereof.

adopted by almost all transportation companies, namely, "contents and condition of contents of packages unknown." Should the goods or part of them be shipped in a damaged condition, or in a bad condition of packing, a note to that effect should be made by the transportation company on the bill of lading, which ceases then to be a *clean bill of lading*. Like any other instrument of credit, a bill of lading may be either deposited with a creditor as security for money advanced, or transferred to a buyer by means of endorsement, and the property of goods will be thereby either mortgaged or assigned. Acting upon this

principle, the owner declares in the bill of lading that the goods shall be delivered unto the consignee or his assigns. When a merchant is


O—Form 168.

UNION LINE.

PENNSYLVANIA RAILROAD CO.—PENNSYLVANIA COMPANY.

The ★ UNION LINE ...

movement that the roads over which it passes possess.

D. S. GRAY, Manager, Columbus, Ohio. JOHN T. MALIN, Agent, 18 South Fifth Street. E. A. DAWSON, Western Supt., Chicago, Ill.
JNO. T. DENNISTON, Auditor, Pittsburgh, Pa. F. H. KINGSBURY, Eastern Supt., New York.

NEW YORK DEPOT, ... 4 AND 5, NEW PIERS 37 AND 38, AND ... PHILADELPHIA, PENNSYLVANIA RAILROAD DEPOTS, MARKET STREET AND GIRARD AVENUE.

Bill of Lading No. 2344 ... JUNE 5, 1889 ... 189

RECEIVED from ... the property described below, in apparent good ... marked and numbered as per margin, and destined as indicated below ... which is in the possession of the Philadelphia, Baltimore & Washington Railroad Company, ... to deliver to another carrier on the route to said destination.

IT IS MUTUALLY AGREED, in consideration of the rate of freight hereinafter named, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the conditions, whether printed or written, herein contained, and which are hereby agreed to by the shipper and by him accepted for himself and his assigns as just and reasonable.

Upon all the conditions, whether printed or written, herein contained, it is mutually agreed that the rate of freight from PHILADELPHIA, PA., to ... is to be, in cents, per 100 lbs. CHICAGO

If ... First Class	If Second	If Third	If Fourth	If Fifth	If Sixth	IF SPECIAL.
						DATE.

And advanced charges at ...

MARKS, CONSIGNEE AND DESTINATION.	DESCRIPTION OF ARTICLES.	WEIGHT. (Subject to Correction).
★ EE	Dry Goods	2409 lbs.
Edwin Shoemaker & Co.		
98		
Chicago		

1. No carrier or party in possession of ... shall be liable for any loss thereof or damage ... goods or by fire, or by quarantine, or by the ... breakage, sudden loss in weight, shrinkage ... open cars. ... otherwise than by reasonable diligence after general ... property by any railroad or route between the point of shipment and the ... the rate is given.

... through route, nor after said property is ready for delivery to the last ... for more than thirty days after ... delivery thereof, no carrier hereto ... shall be subject to necessary cost ... connecting the same for ... and shall not be held responsible for deterioration or loss ... freight. Goods to be consigned to agents where ... agents of any railroad company ... placed with other goods of same kind, without request, ... shall be subject to a lien for storage charges in addition ... No carrier shall be liable for difference in weight or ... carried in bulk.

... reserved to the person or party entitled to receive it within twenty-four ... actual destination, any or all of the car or cars of delivery ... carrier, forwarding and other charges on said property, and then ... to the last carrier having a regular agent at such station or ... charges and all freight charges thereon, and to notify the consignee ... of the car or cars containing the same, and after the ... days (Sundays excepted) after such notice or after the car or cars ... said property hereunder, and hold said property ... charges hereunder.

... from a station at which there is no regularly appointed agent, shall be entirely ... at destination, and not before ... from or delivered on private or other sidings ... detached to, and after they are detached from, ...

6. No carrier hereunder will carry or be liable in any way for any documentary ... or for any article of extraordinary value not specially stated in the bill of lading, ... tions, unless a special agreement to do so, and a stipulated value of the same, are ...

... every party, whether principal or agent, shipping fulnamable, ex- ...

... owner's risk and expense or destroyed, without compensation.

8. Any alteration, addition, or erasure in this bill of lading which shall be made ... bearing this bill of lading ...

... word "order" is written hereon immediately before or after the name of ... have made the necessary indorsement, without any condition or limitation ... satisfied of the arrival of the property at the point of destination ... stroyed before the delivery thereof to the consignee ...

... party" whether principal or agent, shipping inflammable, ex- ...

... owner's risk and expense or destroyed, without compensation.

8. Any alteration, addition or, or erasure in this bill of lading which shall be made ... bearing this bill of lading ...

... word "order" is written hereon immediately before or after the name of ... have made the necessary indorsement, without any condition or limitation ... satisfied of the arrival of the property at the point of destination ... stroyed before the delivery thereof to the consignee ...

... over connecting lines, and in which event ... to be entered on this bill of lading, the freight charges must be paid upon the ... if those described in this bill of lading, the freight charges must be paid upon the ... part of said route, ... printed or ... and over the ...

... each the car or cars of a carriage. And any road carrying ... property herein described shall have liberty to call at intermediate points ... forward, and to detain for the purpose of ... if ... party

Per ...

unable to insert the name of the consignee at the time the bill of lading is made out, a *bill to order* is drawn up, wherein the consignee's

65 11 20 94.

O—Form 15—B.

L. N. WALTON, Freight Agent,
No. 8 WALNUT STREET.

Bill No. 9563 Philadelphia, JAN. 21. 1895 189

Mr. Samuel Henderson and Son

To PENNSYLVANIA RAILROAD COMPANY, Dr.

For Freight from Altoona

Shipped by Brown Bros. Way-bill No. 3965 Date, Jan 19 Car No. 6922

MARKED.	ARTICLES.	WEIGHT.	RATE.	FREIGHT.	CHARGES.	TOTAL.
H	42 Cases Mdse	23,500	10½	24 68	1 75	26 43

General Freight Agt
INVESTIGATION
No.
113024
PENNSYLVANIA RAILROAD CO.

PENNSYLVANIA RAILROAD COMPANY
-3617-
GENERAL TRAFFIC DEPARTMENT.

Received Payment for the Company,

Draw Checks to order Pennsylvania Railroad Company.

name is superseded by the words, *shipper's order*, or simply *order;* it being thus understood that the goods shall be delivered to whomsoever presents, at point of destination, the bill of lading duly endorsed by the shipper. By such a simple arrangement as a *bill to order*, the merchant is enabled to sell the goods while they are at sea or in transit, and a consignment of merchandise may change hands several times before arrival at its destination. When a case to be shipped has been properly entered and weighed, it is then ready to be manifested or *way-billed*, as no shipment is allowed to go forward without a way-bill. This way-bill is simply a memorandum of the consignment together with full and complete shipping directions, giving also the number of the car into which the case has been loaded and the point to which the car is carded. The freight conductor has way-bills for all the goods which he carries. See illustration. In the column headed *freight* are extended the total charges between points from and to which the way-bill is made. In the column headed *advances* are extended the amounts paid out by the forwarding station as back charges. When a shipment is received from a connecting road at a junction the agent of the receiving road pays the freight charges against the shipment up to that point; these are termed advanced charges, which is a credit to the latter line because it *advanced* the money. In the column *prepaid* are extended the amounts collected from the shipper. When a shipment is prepaid a statement is made on the way-bill giving the point to which the prepayment is to cover, and is a debit to forwarding station and a credit to the receiving agent. Card tickets to be attached to the outside of the car are made from the way-bills. The freight conductor turns over way-bill and merchandise to the agent at the point of destination.

General Freight Rates.

There are so many things which enter into consideration in formation of freight rates by railways that no specific rules can be given Generally speaking trade seeks the cheapest path from the producer to the consumer. The purpose of interstate commerce laws is to secure for every person and place just and equal treatment at the hands of the transportation companies. All rates must eventually be brought to a uniformity through competitive influences. Many instances could be cited of large concerns whose shipping is so necessary to a particular road, that they are in a position to, in a limited way, dictate their own terms. This is sometimes done between competing lines by an ar-

sociation of shippers, so that rates are largely a variety of conditions and compromises. Frequently joint and uniform rates are made by agreement between the general freight agents of competing roads. The rates between the East and West are regulated largely by what are known as the Trunk Line and Central Traffic Associations. The rates between New York and Chicago are taken as a basis per mile upon which rates between intervening points are computed.

Differential Freight Rates.

The name *differential* as applied to freight rates refers to the differences which are made by railroad companies. Certain routes are by agreement allowed to charge a lower rate than others running to the same points. From each of the eastern cities there are two classes of roads—the *standard* lines and the *differential* lines. The standard lines have the advantage of more direct connections and better freight organization facilities. The differential lines reach the freight destinations by circuitous routes, in some instances by almost double the mileage. With a view of equalizing these conditions, the general traffic associations allow the differential lines to carry freight at a lower rate per mile than the rate charged by the standard lines. The standard lines from New York to the West are the New York Central, Pennsylvania, and the Baltimore and Ohio. All the other roads having a connection East and West are classed as differential. The standard lines charge 4 cents a 100 pounds more for first class freight than the differential lines.

Passenger Railway Rates

Local passenger rates are usually based on 2½ or 3 cents a mile for a single ride, and for a round trip two-thirds of the double rate. The through passenger rates are made by the mutual agreement of the general passenger agents of the several roads interested. The entire amount charged is proportioned between the roads carrying the passengers according to the mileage of each. Sometimes it is necessary to take into consideration also the fact that one section of the through line is permitted to charge 3 cents per mile for local traffic while another section of the through line passing through a different state may not charge more than 2½ cents per mile for local traffic. By a *stop off* is meant a break in the continuous passage at some intermediate point. Stop-off privileges are granted on certain trains at no additional expense. Most of the railways sell what are known as *mileage-book*

tickets. These are books good for 1,000 miles of transportation. They are usually sold for two cents a mile and can be used only by the purchaser. *Coupon tickets* are those issued by one road for transportation over several roads. Almost all through tickets are of this class. *Ticket scalpers* are men whose business it is to buy and sell tickets at cut rates. They are not permitted to do business in Pennsylvania and some other states.

Freight Classification.

The transportation business of the United States is so varied and complicated that a proper study of its freight tariffs and classifications would require much more space than can be given to this paragraph. Most of the transportation companies issue freight guides which give in detail the classifications of all kinds of commodities. It is evident that it should cost less to ship a hundred pounds of wheat from Minneapolis to New York than to ship a hundred pounds of jewelry from New York to Minneapolis. The farmer would necessarily be obliged to quit growing wheat if it cost him 60 cents a bushel to ship it to the sea-board. The jeweler can easily afford to pay two or three dollars to transport one hundred pounds of jewels from one point to another. A transportation company in making a schedule of rates would consider, 1. the competition of other roads, 2. the total volume of business, 3. the direction—that is, of loaded trains or empty trains, 4. the value of the article, 5. the bulk and weight, 6. the risk of transportation, 7. the facilities for loading and unloading, 8. the special equipment, if any, necessary. The classifications now generally adopted by railways have been brought about by a variety of influences and many compromises. At the present time there are three distinct freight classifications: 1. The official classification covering the territory east and northeast of Chicago. 2. The southern classification. 3. The western classification. That is to say that a particular commodity might be considered *first-class* in one section, *second-class* in another, and *third-class* in another.

Freight Regulations.

When freight is consigned to a certain party, the freight is delivered to that party only, or upon his written order. When consigned to one party *in care of* a second party, the freight is delivered to the second party only, or upon his written order. When consigned to one party, *notify a second party*, the second party is notified, but delivery of the

freight is only made upon the presentation and surrender of the original shipping receipt or bill of lading, properly endorsed by the first party. When consigned simply *to order* or *to order of shipper*, the freight is only delivered upon presentation and surrender of the original shipping receipt or bill of lading, properly endorsed by the party to whom it was issued. When consigned *to order* of a certain party, the freight is only delivered upon the presentation and surrender of the original shipping receipt or bill of lading, properly endorsed by the party to whose order the property is consigned. No freight or any portion of a consignment can be removed from a station until all the charges are paid.

Transportation Accounts.

There are no more complicated systems of accounts than those necessary to railroading. The collecting of freight and holding local agents responsible for it, the dividing of the freight collected between several lines, the following of freight cars, the checking and auditing of way-bills, the proportioning of ticket receipts, the purchasing of material, the traffic expenses, and a thousand and one other things go to make up a system of account keeping which in the best regulated companies, is remarkable for exactness and thoroughness. We give here in tabulated form an analysis of a set of railway accounts:

1. Capital Stock and Funded Debt.

2. Cost of Road and Equipment . .
   - Supt. and Engineers Expenses
   - Right of way
   - Road-bed and Track
   - Rolling Stock
   - Repair Shops
   - Telegraph Lines
   - Offices
   - Additions and Betterments

3. Income . . . . . .
   - Earnings
     - Passengers and Freight
     - Express and Mail
     - Car Service
   - Other Sources
     - Interest and Rents
     - Surplus of previous year

4. Operating Expenses . . . . . .
   - General Expenses
   - Traffic Department Expenses
   - Maintenance of Way
   - Maintenance of Engines and Cars
   - Conducting Transportation

5. Fixed Charges . . . . . .
   - Interest
   - Rentals
   - Taxes
   - Franchise Charges

6. Balance Sheet Assets	Cost of Road Cost of Equipment Real Estate and Buildings Stocks and Bonds Franchise Other Permanent Investments Cash on Hand Bills Receivable Open Accounts Material and Supplies Sinking Fund Sundries Profit and Loss (Surplus)
7. Balance Sheet Liabilities	Capital Stock (Preferred and Common) Funded Debt Interest Due and Accrued Dividends Unpaid Audited Vouchers (Ready for Payment) Pay-Rolls (Unpaid) Open Accounts Bills Payable Sundries Profit and Loss (Deficit) Deficit of Previous Year

Interstate Commerce.

The theory under which the Interstate Commerce Law was framed, contemplated the maintenance of the independent existence of railway corporations, subject to such organic changes as their owners might from time to time accomplish by contract among themselves in subordination to the laws of the several states under which they held their various charters, and all working together under a uniform national control. The maintenance of through routes and of through tariffs was provided for, and it was expressly made unlawful for any common carrier in any manner to prevent the continuous carriage of freight from the place of shipment to the place of destination. All agreements between the various railway associations are required by law to be filed with the Interstate Commerce Commission. The fundamental purpose of the Interstate Commerce Law is the prevention of discrimination of every form. Before its enactment unjustifiable discriminations were made between business houses and between different towns or localities; also by the secret cutting of rates and by systems of rebates; also by the granting of free passes. These abuses have been greatly reduced through the action of this Federal law. It requires the establishment and publication by carriers of tariffs showing rates, fares, and charges for all interstate carriage of passengers and freight. These tariffs are filed with the commission and must be absolutely adhered to.

Railway Management.

The president is the executive head of the company and with the aid of a board of directors he directs the general policy of the road. There are also vice-presidents and general managers who have much of the active management in charge. The superintendent of the roadway keeps the road in good condition. The superintendent of transportation has charge of the handling of trains. The superintendent of machinery has charge of the construction and maintenance of all rolling stock, and is assisted by the master car builder. The traffic manager or general freight and passenger agent has charge of the making of rates and the solicitation of business. The comptroller has charge of the accounts. The paymaster receives money from the treasurer and disburses it under the direction of the comptroller. Then there are real estate departments, legal departments, purchasing departments, operating departments, roadway departments, etc. The officers of a very large railway company are given here in tabulated form:

1. President
2. Vice President
3. General Manager
4. Secretary
5. Treasurer
6. Counsel
7. Comptroller { Local Auditors / Traveling Auditors }
8. Purchasing Agent—Storekeeper
9. General Superintendent
   - Station Agent
     - Receiving Clerk
     - Shipping Clerk
     - Loading Clerk
     - Discharging Clerk
     - Collectors
     - Laborers
     - Yard Master
       - Yard Engineers
       - Switchman
       - Conductors
       - Brakeman
   - Train Master
     - Train Despatchers
     - Operators of the Telegraph
     - Conductors and Brakemen
   - Car Accountant
     - Record Clerks "Foreign and Local"
     - Mileage "
     - Lost Car and Tracing Clerks
10. Supt. of Machinery
    - Foreman Mch. Shop
      - Engineers and Firemen
      - Hostlers and Cleaners
      - Mechanics and Laborers
    - Foreman Car Shops
      - Mechanics and Laborers
      - Greasers
      - Car Inspectors

- 11. Supt. of Roadway
  - Road Master
    - Supt. of Bridges
      - Bridge Foreman
      - Watchman
      - Mason and Carpenter Gang
    - Supt. of Road
      - Section Foreman
      - Gang and Track Walkers
      - Wood and Water Tenders
      - Floating Gang Constructing in Transit
- 12. Traffic Manager
  - General Freight Agent
    - Division Freight Agents
    - Traveling Freight Agents
    - Rate Clerks
    - Tariff Clerks
    - Freight Claim Agent
      - Register Clerk
      - Investigating Clerk
      - Voucher Clerk
      - Special Agent
  - General Passenger Agt
    - Division Passenger Agent
    - Traveling Passenger Agent
    - Rate Clerk
    - Apportionment Clerk
    - Advertising Agent

Baggage Transfers.

Every one in America is familiar with the railway methods of carrying passengers' baggage from one point to another. Usually a bag or trunk can be *checked* from and to the points indicated on the passenger's ticket. In all the large cities there are transfer companies whose agents board in-coming trains and check baggage to the passenger's city destination. The charge for this is usually 25 cents. These transfer companies have offices in the railway depots and usually do the business of taking baggage to and from trains. When trunks are more than the regulation weight an over-weight charge is made. Storage is usually charged when baggage is allowed to remain at a depot more than 24 hours.

Baggage to Canada.

If the passenger's ticket reads from an American point to a point in Canada or Mexico the accompanying baggage is usually checked only to the point where the railway crosses the border where it is examined by a customs official and re-checked by the baggage master to the passenger's destination. Passengers are expected to claim their baggage at the Canadian or Mexican border and permit the customs officer to see that nothing dutiable is being carried across. This is usually the work of but a few moments. It is quite safe, if late at night, to give your trunk keys and baggage checks to the sleeping-car porter with, of course, a small fee to keep him awake. Baggage is examined by an officer of the country into which the passenger is go-

ing. Sometimes excursion parties to Canadian points have their baggage sent through *in bond* and examined upon their arrival. Unclaimed baggage is held at the border until called for.

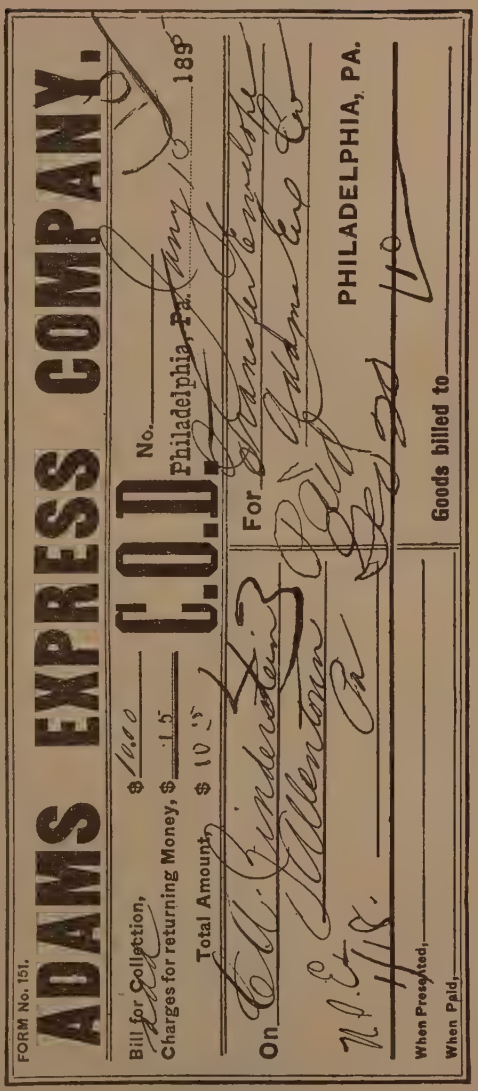
Food Staples and Transportation.

About one-half of the business of this country consists in the production, conversion, transportation, and final sale of articles of food. This consumption of food cannot stop even in the hardest of hard times, because the most productive country is always within about one year of starvation. A part of the food supply is consumed where it is produced but about six times as much become articles of commerce—that is of purchase, sale, and transportation. Western grain is sold by the farmer to the miller or his agent, the flour is sold by the miller to the merchant, by the merchant to the baker; finally the baker sells the bread to the consumer. It has been estimated that twelve tons of food, fuel, fabrics and fibres are moved one hundred and ten miles by steam railways only, for every man, woman, and child of our population, taking no account of transportation by river or canal. Retail transportation by wagons costs more than wholesale transportation by railway. It costs more to deliver the bread by wagon than it does to carry the flour from which it is made 2,000 miles.

Transportation by Express.

The express business of the country is done by a few very large private corporations. There are six of these the names of which are well known. The United States Express is confined largely to the northeastern portion of the country with leading offices in New York, Philadelphia, Boston, and Chicago. The Wells-Fargo Express has its principal offices in the far west. It also does a large foreign business. The Adams Express covers the eastern states with principal offices in New York, Philadelphia, and Baltimore. The Pacific Express has its principal offices in San Francisco, Galveston, and New Orleans. The Southern Express has its principal offices in New Orleans, Savannah, and Baltimore. The American Express covers the central and eastern states with principal offices in St. Louis, Cincinnati, and Boston. There are many other express companies some of which do a large carrying trade. By mutual arrangement packages are delivered from one company to another where this is necessary for the destination to be reached, and money orders of one company are usually cashed by other companies, so that in reality the public is as well served by a

number of companies as it would be if all were under one management. In some instances the express companies build and own their own cars. The charges are higher than transportation by freight, but quicker and better service is rendered.



Merchandise by Express.

When ordering goods to be delivered by express give the address precisely. Country residents in particular, often receive mail at one office and express at another. Express charges vary according to the character and weight of the article and the distance to be carried. As a rule the charges may be prepaid or not, as the sender prefers; but on long distances advance

payment is sometimes required. Express agents will always give a receipt for the packages taken into their charge if so requested, and the possession of such receipt may be of particular value when a package has been damaged, delayed or lost by the way. The address of the sender should always appear on the outside. The receiver of an express parcel is obliged to sign a receipt when he takes it from the express company. The word "collect" written on the lower left-hand corner of a C. O. D. invoice, indicates that the expressman is to collect from the receiver of the parcel not only its C. O. D. value and express charges, if not paid in advance, but the small fee which the company charges for carrying the money back to the shipper. The accompanying illustration is a reduced photo-engraving of a return C. O. D. envelope.

Money by Express.

The great bulk of the money, that is, the actual coin and bills, carried from one point to another, except that carried in the pockets of individuals, is carried by the express companies. A leading express company carries money for the United States government at the very low rate of fifteen cents for every $1,000 in greenbacks. The profit is made out of the large shipments. In 1889 this company carried at one time $15,000,000 from Washington to New York, in bills of large denominations packed in two small wooden boxes. The fee was $2,250 and the actual expense less than $25. On another occasion this same company carried at one time seven million dollars in gold from Philadelphia to New York. For this shipment the express company received $3,500. The express companies do a great deal of the carrying trade for banks. Money may be sent from any one point to any other through the express companies at a very small expense. The express agent will furnish you with a special envelope in which to place your bills. When properly addressed he will put a cord through the center of the envelope and bills and after tying will seal the cord to the envelope in such a way that a bill cannot possibly be taken from the package without breaking the seal. This method is absolutely safe for although the express company does not take a record of the amount of money which you enclose, they guarantee the safe delivery of the parcel in the secure condition in which you see it leave their hands.

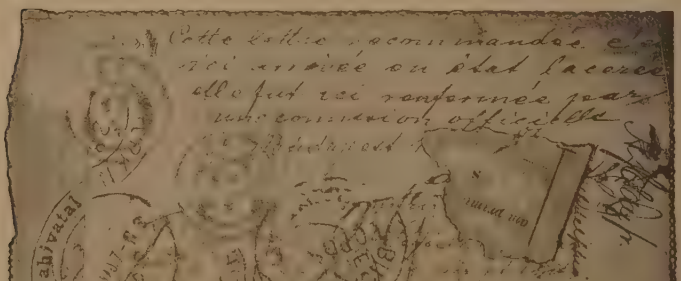
Transportation of Mail.

It costs about fifty millions of dollars annually to transport the

United States mails. This sum is spent simply for carrying the mails. The *star service* is that which is let under contract without reference to the mode of transportation other than that the mails shall be carried with "celerity, certainty, and security." It includes nearly all of the inland service that is not performed by railroads, steamboats, or mail messengers. The system of star routes, starting from railroads as bases of supply and reaching out to the most remote settlements, comes nearer to the people in rural communities than any other branch of mail transportation. The total length of star-service routes in 1895 amounted to about 260,000 miles. The regulation wagon service provides for the transporting of the mails in the largest cities. The total mileage of steamboat service wholly within the United States is about 10,000. There are in operation nearly 3,000 railroad routes, aggregating 175,000 miles in

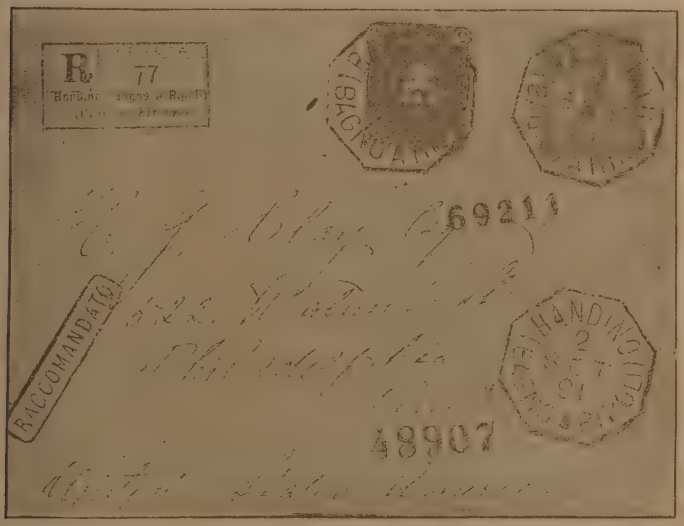
length. The government pays $42.75 per annum for carrying 200 pounds of mail daily per mile of route. For 500 pounds $64.12 is paid, for 1,000 pounds, $85.50, and so on. Land grant railroads

receive 20 per cent. less than these rates. The electric car is becoming each year a more important factor in mail transportation. The



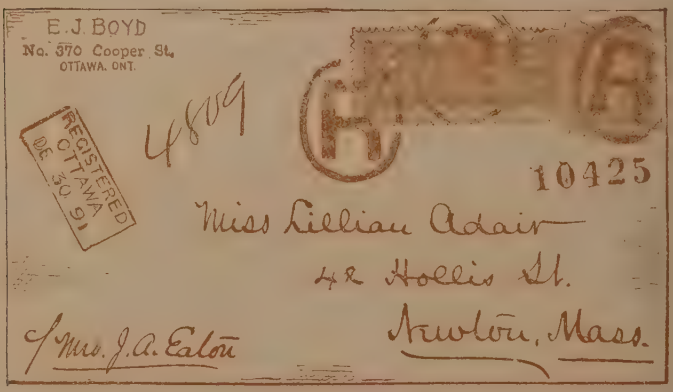
seaport offices maintained on several of the fastest ocean steamers, are a valuable and indispensable feature of foreign mail transportation. Under the existing regulations of the universal postal union, an

ordinary letter may now customarily go, at an expense of only five cents, to almost any place in the civilized world, carried there by the most rapid means of conveyance, its privacy uninvaded, its safety zealously cared for, and its delivery into the hands of him for whom it is intended, practically guaranteed. It may traverse country after country in its journey, and may, as a rule, exact the fullest accessory service from the government of each in hastening it to its destination, without other cost than that comprehended in the little postage stamp affixed to it by the sender when he starts it on its travels. Moreover, every nation included in the postal union is obligated to receive and

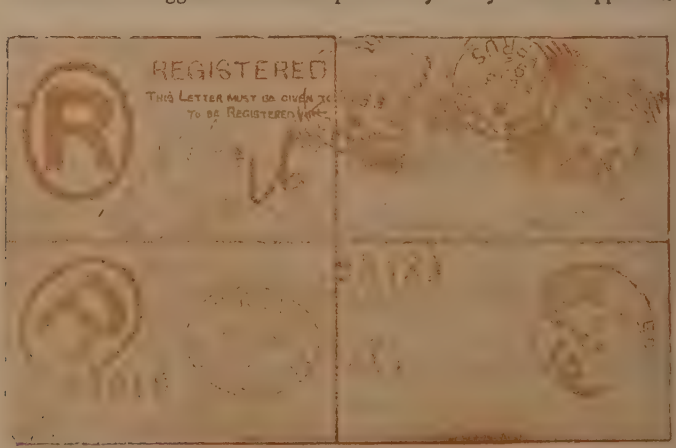


safely carry to its own boundary, in bulk, all mails, however great, sent to it for transmission to countries beyond, at charges plainly laid down, and under conditions admitting of ready international settlement. One of the main instrumentalities by which this almost ideal condition of things has been brought about is the assembling, once every five years, of what is known as the "Universal Postal Congress," made up of representatives of nearly all the nations of the world, by whom are discussed all defects, if any, of system or service, by whose votes all practicable improvements are inaugurated, and in whose deliberations such a spirit of fraternity usually prevails that self-seeking is

almost unheard of. Every one has at some time or another received a letter which through an error in the address or for some other cause went to the wrong post-office or to some other person. The effort made by



the post-office department to find the right person is usually shown by the number of suggested addresses prefixed by "Try" which appear on



the face. We take the liberty of reproducing by photo-engraving on a preceding page, a copy of the envelope of such a letter. It was originally sent from a point in the United States to a European address. The

effort made by foreign post office officials to find the owner is clearly outlined in the abundant stamping and writing which can be seen on the front and back of the envelope.

Money by Registered Mail.

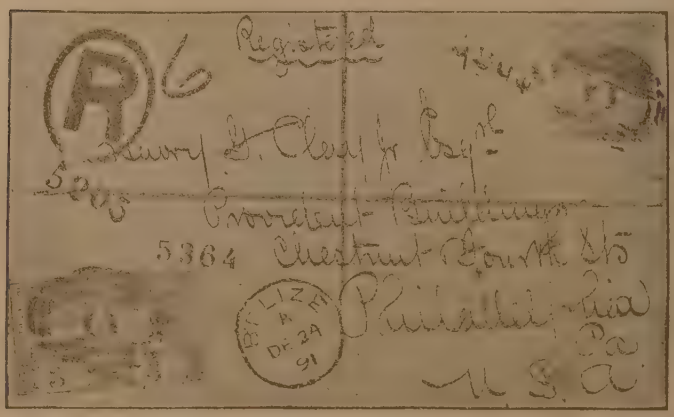
Every country in the postal union has a registered mail service. Our illustrations show photo-copies of registered letters from British Honduras, the island of Cyprus, Canada, Italy, and other places. It is interesting to note the peculiar stamping of these letters showing the

records taken of them and the care with which they are handled. In many countries a special heavy linen envelope is used and special care is taken in sealing. In this country money or other valuables may be sent by registered mail from any post office in the country. Besides the address, the letter or parcel to be registered must have the name and address of the sender plainly written or printed upon it. The registration fee is eight cents in addition to the regular postage. The sender receives a receipt from the postmaster, and for all registered letters or packages lost, not exceeding $10. in value is entitled to reimbursement by the postal authorities.

For this reason it is safer to send money by express than by mail, for the number of registered packages stolen yearly is quite large although small in comparison with the large number handled. In the United States thousands of dollars are sent daily through the mails in small amounts in unregistered letters. This cannot be said of the mail of foreign countries where the people are not accustomed to take the risks which are every-day matters with our people.

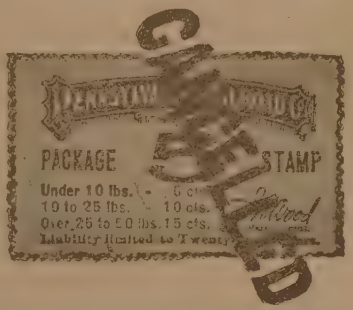
Other Methods of Sending Money.

There are several comparatively safe methods of sending money from one point to another. Checks and bank drafts are most common. The post office department provides *money orders* for sums not exceeding



$100 at a very small expense depending upon the amount of the order. These orders are simply drafts by a postmaster at one place on a postmaster at another, asking him to pay a particular person the sum named in the order. The actual money is not transmitted. The order, which you enclose in your letter, contains the name of the person to whom the money is to be paid, but not the name of the sender. The postmaster issuing the order sends to the postmaster upon whom the order is drawn a blank advising him of the particulars of the order, its number, and the name of the person who bought it. The postmaster on whom the order is drawn will not pay the order until he has received the *advi-* and until he has satisfied himself as to the identity of the

person to whom the money is to be paid. To obtain a money order it is necessary to fill out a printed blank provided for the purpose at the post office. In filling out this blank be careful to write the names asked for correctly. When paying a money order the postmaster asks the person receiving the money to receipt the order. A post office money order may be transferred by endorsement, but only once. A blank form is printed on the back. In case of the loss of a money order a duplicate will be issued if application is made to either the issuing or the paying postmaster. The duplicate will be issued by the department at Washington and forwarded to the person making application. All the leading express companies issue *express money orders* payable at any of the larger offices of these companies. They are negotiable anywhere and banking institutions take them on deposit as they do checks and bank drafts. Any person can buy an express money order by simply paying the amount of the order and the small fee to the express agent. It is necessary sometimes to send *money by telegraph.* This is more expensive than other methods. Only the larger telegraph offices are money order offices. The rate is one per cent. of the amount of the order plus double the tolls on a single message of fifteen words between the transfer places.



Parcel Delivery.

The delivery of parcels has come to be quite an important business in large cities. There are private companies who deliver parcels and and messages to any part of the city for a small consideration, usually five or ten cents according to the size of the parcel or the distance to be covered. The railways in connection with such companies carry parcels into suburban towns. In this way by paying five or ten cents additional one can have a parcel delivered ten or twenty miles from the point where it was purchased. The smaller stores deliver all their out-of-town parcels to the parcel companies. The accompanying engraving shows a kind of delivery stamp in use in Philadelphia. The use of these stamps is an advantage to the merchant for the reason that he can

buy them as he would postage. They are also of great convenience to the delivery company. The larger business houses deliver daily by wagons within certain distances, and to points ten or twelve miles distant on certain days. The accompanying illustration is a copy of a delivery tag from a parcel delivered from John Wanamaker's immense establishment. With from five to ten thousand salesmen and women and from fifty to one hundred thousand customers daily the system of packing, checking, and delivery with rarely a blunder must be almost perfect. The time may not be far distant when parcels as well as mail

will be shot through tubes at lightning speed, when we can telephone ten miles for our breakfast steak and in five minutes have it drop from a tube to our kitchen table.

Transportation by Water.

By the provisions of the United States Constitution the Federal courts have jurisdiction of questions involving maritime matters and shipping interests generally. A ship is personal property and when sold, a bill of sale should be recorded in the custom house of the port where the ship is registered or enrolled. The captain or master of a ship in serious distress and without opportunity to communicate with the owners of the cargo can mortgage the cargo no matter to whom it belongs, or he can throw the cargo overboard to save the vessel or its passengers. The captain of a vessel must, within a certain number of hours after arrival at any port and before "bulk is broken," deliver to the customs officer the *ship's report* or *manifest*. This is a declaration of her cargo and the stores existing on board, the whole drawn up in a

prescribed form, and signed by the captain. The captain of a ship preparing to sail must have her entered outwards at the custom house before taking any cargo on board. When the cargo is completed, the captain is delivered a *manifest* of the goods shipped, and, upon approval, the vessel is *cleared* outwards. The regulations as to transportation, bills of lading, etc., are similar to those applying to railways and other *common carriers*. When two vessels are approaching each other, the one going *free* must give way to the one *close-hauled*. If they are both free or close-hauled, each must go to the right. Sailing vessels need not change their course, as they have the right of way over steamers. The captain of a ship has absolute control of the crew and the passengers. Outgoing vessels must have on board *shipping articles* which describe the voyage for which the sailors ship, and the terms on which they ship. These must be signed by each sailor on penalty of a fine. A ship coming into port is obliged to take the first *pilot* that offers. The captain is not responsible while the pilot is in charge.

Salvage.

By *salvage* is meant the compensation which is given to persons or vessels that voluntarily assist in saving either ship or cargo, wrecked, or in danger of being wrecked. The amount of salvage to be given is fixed in each instance by the United States Court, and sometimes is very large.

Dunnage.

It is usually the duty of the first mate to attend to the *dunnaging*, chocking, and securing of the cargo. By *dunnage* is meant the wood-packing placed between the cargo and the sides and bottom of the ship.

Log-book.

Ships are required by law to keep what is known as *log-books* in which are written a full account of the voyage, the daily locations of latitude and longitude, and the names and addresses of passengers and crew.

Entering Port.

Vessels entering American ports are boarded by custom house officials who examine the cargo and superintend its delivery. Inspectors may board vessels, not only in port, but within four leagues of the coast, if bound inland, for the purpose of demanding manifests and of examining and searching the vessels.

Quarantine.

The quarantine regulations of United States ports are very exacting. These come under the control of state Boards of Health and differ somewhat in different ports. The quarantine station is usually located outside the harbor and vessels cannot enter until they get a certificate of health from the quarantine officer. The captain is obliged under penalty to furnish the health officer with complete and correct information regarding the sanitary condition of his vessel. No vessel from a foreign port must attempt to approach a port of entry until the health officer has granted his permit, nor can any person leave the vessel which has not been visited by such officer, without permission. Where no contagious disease is found to exist on board, and where the vessel does not come from an infected place, a certificate will be promptly given, and the vessel permitted to proceed.

Wharfage.

It is lawful and customary to charge and receive wharfage or dockage, from every vessel that makes fast to any pier, wharf, or bulkhead. Local regulations differ, and some cities grant free wharfage to encourage shipping.

Clearance at Consulate.

Having *cleared* at the custom house, the captain of a foreign vessel is then required to clear at the Consulate of his country. For this purpose he must produce to the Consul his certificate of clearance from the customs, as, until the production by him of this certificate, the Consul is not permitted to part with the certificate of registry which was lodged with him upon the ship's arrival and which the vessel cannot enter another port without. It is customary for the Consul to attach to the custom house clearance a certificate of his own, signed with his official signature, and bearing the seal of the Consulate, setting forth that the vessel has been entered and cleared according to law.

EXAMINATION QUESTIONS.

1. Give some account of the early methods of transportation.

2. Enumerate some of the advantages to civilization of the modern facilities for speedy and safe transportation.

3. "On the whole, cheapened transportation is more uniformly beneficial to the consumer; its temporary advantage to the producer very often leads to overproduction."

Discuss this statement.

4. Which should have the strongest influence in determining the business to be carried on in a particular place, 1. the location of the place, 2. its natural advantages independent of its location?

5. Give reasons for the rapid growth of large cities at the expense of smaller places.

6. Can you give any good reason for the fact that transportation ates are lower in Europe than in America?

7. Enumerate some of the abuses of rate discrimination in the United States and tell how they are met.

8. What are the advantages to the public of the freight organizations which arrange for *through* service?

9. In a legal sense what is meant by a *common carrier?*

10. A stage runs daily from A to B. Mr. Brown wishes to ride from A to B but the driver refuses to carry him. Is the stage company liable?

11. What is a *bill of lading?* How does it differ from a *shipper's receipt?* Is a *shipper's receipt* negotiable?

12. What is a *way-bill?*

13. Who are the three parties to a *bill of lading?*

14. Is the transportation company obliged to know the contents of the cases shipped? If not, how are they classified under first, second, or third class freight?

15. When a merchant is unable to insert the name of the consignee at the time the *bill of lading* is made out, how does he draw up the bill? Who is the *consignee?*

16. What are the advantages to the shipper of the *bill-to-order* system?

17. Freight is shipped from A through B a junction point to C. From A to B it is carried over one road and from B to C over another. Explain fully the method of adjusting the freight between the two roads.

18. Explain in detail the methods adopted by leading and competing railway lines to regulate and adjust freight rates.

19. How is freight classified? Why does it cost less to bring a ton of wheat from Minneapolis to New York than a ton of paper?

20. Why was the Interstate Commerce Act passed? Enumerate the chief abuses corrected by it.

21. Explain fully the application of the term *differential* to freight regulations. Name a *differential* line between New York and Chicago. Name the three *standard* lines between New York and Chicago.

22. How are (1) *through*, (2) *local* passenger rates regulated?

23. Explain the use of *mileage book tickets*.

24. What is meant by a *stop-off* privilege?

25. What are *ticket-scalpers*? Where do they secure their tickets?

26. Enumerate the chief things to be considered by a transportation company in making a schedule of freight rates.

27. Freight is consigned to A in care of B. Under what conditions can A secure the freight?

28. In the annual statement of a railway company the following items appear: *Cost of Equipment; Deficit of Previous Year; Dividends Unpaid; Franchise; Sinking Fund; Capital Stock.* Which are resources and which liabilities?

29. Give in detail the leading officers of a railway company and an outline of the duties of each.

30. How is passengers' baggage transported from one point to another? When is it necessary to pay *extra* baggage? What weight of baggage is allowed? If a trunk is lost through the carelessness of the company what amount of damages can be collected?

31. Tell something about the business of the *transfer companies*.

32. How long may baggage remain at a depot before storage is charged?

33. A traveler buys a ticket in Albany, N. Y., for Guelph, Ont. He finds that his baggage is checked only to Niagara Falls. Explain the reason for this.

34. "It costs more to deliver the bread by wagon to the consumer than to carry the flour from which it is made, 2,000 miles."

Account for the truth of this statement.

35. Name the leading express companies of the United States.

36. Compare *mail*, *express*, and *freight* transportation.

37. Give some particulars of the C. O. D. express business. What is the significance of the word *collect* written on the lower left-hand corner of a C. O. D. invoice?

38. What methods have been adopted by the express companies for the safe transportation of money from one point to another?

39. About how much does it cost annually to transport the U. S. Mails?

40. What is meant by the *star service* in mail transportation?

41. Give some particulars of mail service under

1. The registry system.
2. The special delivery system.
3. The money order system.

42. The government pays $42.75 per annum for carrying 200 pounds of mail daily per mile of route. A certain railway carries an average of 855 pounds of mail daily for the months of June, July, and August. How much should be received for the service?

43. What is meant by the *Universal Postal Union*?

44. Describe in detail the several common methods of sending money from one point to another.

45. A telegraphic message from A to B costs 40 cents for ten words and 3 cents for each additional word. What will it cost to *wire* $250 from A to B?

46. Give some particulars of the parcel delivery systems of our large cities.

47. A merchant sends $1,000 worth of goods from A to B by

steamer and another $1,000 worth from A to B by rail. The steamer becomes disabled and the merchant's goods are thrown overboard. The train is wrecked and the goods are totally destroyed. Has the merchant equal claims against the transportation companies?

48. What is meant by

1. Breaking bulk?
2. The ship's manifest?
3. Clearing outwards?
4. Close-hauled?
5. Shipping articles?
6. Dunnage?
7. The log-book?
8. Salvage?
9. Wharfage?
10. Certificate of registry?

49. Why and under what authority are vessels from foreign ports detained at *quarantine* upon arrival at New York or other seaport cities?

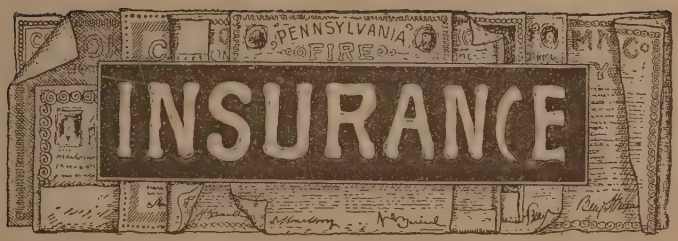
50. Give in detail the official duties of a captain, (1) upon entering port, (2) when about to clear.

51. "The question of the demoralization of railway rates is as important as the tariff or the currency question, and is worthy of Presidential proclamation. The transportation rate fixes the price of every commodity, whether raw material or manufactured. Therefore, rates by all lines from all points similarly situated to all places similarly situated should be the same, and should be as well known to the public as the postage upon a letter. Then no advantage could be secured by the rich shipper or the great trust over the enterprising neighbor who has less capital but equal ability."—*Chauncey M. Depew.*

Show how the transportation rate fixes the price of commodities, and discuss fully Mr. Depew's statement.

52. Would the Mississippi River serve larger transportation interests if its course were east and west instead of north and south?

53. Locate the following canals and give some particulars of their advantages to commerce: Kiel; Suez; "Soo;" and Manchester.



Life, Fire, Marine, and Indemnity Insurance.

Antiquity of Insurance.

We find some evidence of the existence of insurance associations as far back as the Punic Wars between Rome and Carthage when the government of Rome guaranteed the transportation concerns against loss by storm or the enemy. Spain and Portugal dispute the real credit of having invented insurance as a practical business. About the beginning of the fifteenth century marine insurance was pretty generally understood and made use of by the great maritime concerns of Spain and Portugal. Following marine insurance which was soon adopted by other nations, came life insurance against which there was a strong prejudice from the beginning. It seemed to be setting a premium upon murder to insure a man's life, and society was in altogether too lawless a condition four hundred years ago to make it judicious to offer any inducements for life destruction. Some of the largest insurance associations of Great Britain have a history of nearly two hundred years.

Principles of Insurance.

It is the purpose of the state and of good government to aid and protect its citizens, but there are all kinds of losses, accidents, storms, panics, etc., which it is impossible for even the best governed state to protect its people against. These losses and accidents cannot be wholly prevented and the many must bear the burden of the few and that the many may do this in a legal and business-like way, the various

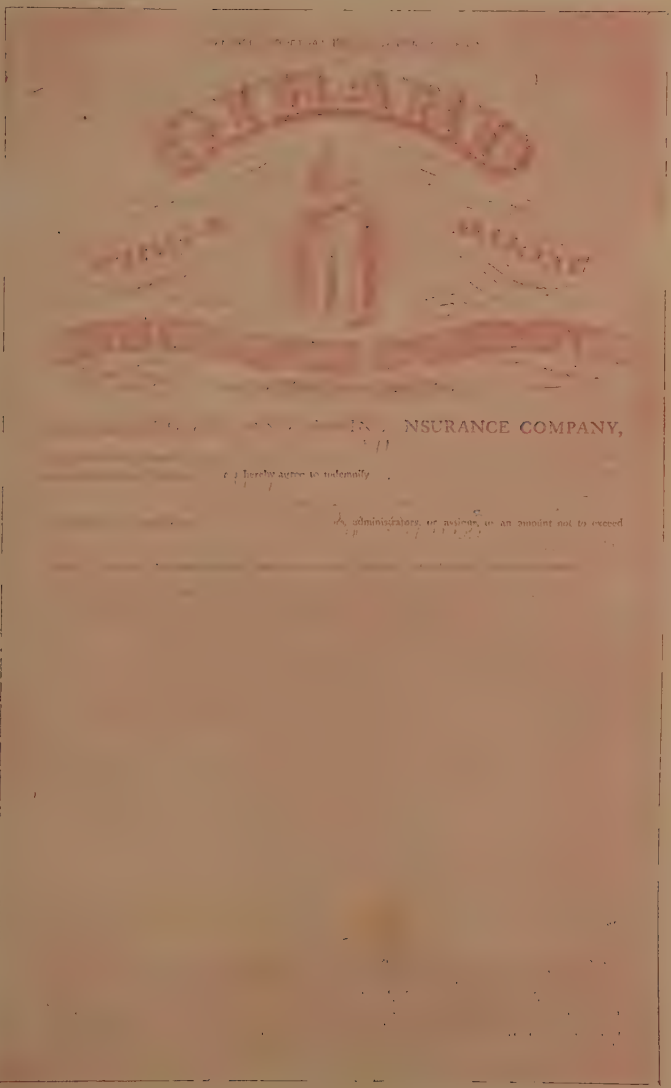
forms of insurance have been instituted. A loss which is distributed among many is scarcely felt by each individual. The majority of families are not so well provided with means that they can endure without financial suffering the loss by fire or shipwreck of their property, or by death of the head of the household. Statistics play an important part in insurance estimates. The insurance association can estimate from years of careful records, almost absolutely, as to how large their losses will be in any given year.

Systems of Insurance.

In modern times the forms and systems of insurance have multiplied greatly. There are, however, two general divisions, namely, the *mutual*, and the *industrial*. In mutual insurance every policy holder is a member of the association. In the industrial system the insurance company is a stock-company and for certain premiums it insures those who have no connection whatever with the concern as a corporation. The mutual insurance system needs no capital stock. The means of repairing losses comes exclusively from the contributions, or premiums, of its members. The various labor and benevolent organizations have systems of mutual insurance. In case of death every member is liable to an assessment which varies in amount. If the assessment is not paid the policy is forfeited. The larger mutual companies have fixed premiums payable at stated intervals and in their management, they are similar to the industrial companies. In the larger mutual companies the yearly surplus—that is, the receipts from fixed premiums, over and above, the loss claims and expenses—is either added to a reserve fund, or is treated as a profit and is deducted proportionately from the next annual premiums of the various members. In the industrial system the premium is a fixed sum, by the payment of which the insured party secures the right of complete restitution under all circumstances, and nothing more. If the premiums amount to more than the losses, the surplus belongs to the company and not to the policy holders. If the premiums are less than the actual loss, the company must meet the loss. It makes no difference to the insured whether there are many or few accidents, whether the damage done is great or small. There are now insurance companies covering all kinds of risks—from death, accident, fire, flood, hail, breakage, embezzlement, etc.

Fire Insurance.

Fire insurance covers those losses of property which occur through the destructive agencies of fire. In the valuation of buildings the cost


NSURANCE COMPANY,

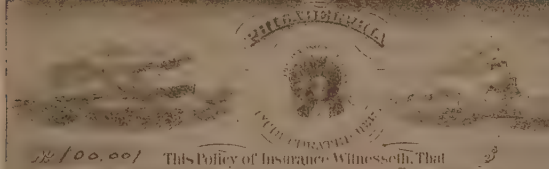
of rebuilding in the case of total destruction is the basis of estimate. There are various matters which enter into consideration in fixing the insurance rate; such as the style of the building, whether more or less fire proof; the business which is conducted in it; the condition of the building and its surroundings; and the condition of the local fire companies and their facilities for putting out fires. Builders are divided by an association of insurers, called *underwriters*, into several different classes, according to these circumstances, and the premiums are graded accordingly. It is customary to make up the whole amount of insurance by distributing it among several companies. The losses are then settled upon the average principle. When a fire occurs the insured gives immediate notice and renders a sworn statement of his losses. The insurance company usually reserves the right to take the whole or any part of the damaged property. Cash or its equivalent in securities or books of accounts cannot be insured. The only safe place for these is fire-proof vaults. The average clause referred to reads as follows:

"This company shall be liable only for such rateable proportion of the loss or damage happening to the subject insured, as the amount insured by this company shall bear to the whole amount insured thereon, without reference to the dates of the different policies, or the solvency of the underwriters; and the amount to be paid shall not in the aggregate exceed the amount insured by this policy."

A building worth $100,000 is insured with A, for $40,000, with B, or $20,000, and with C, for $30,000. Two days after the policy with B. expires, a fire occurs, damaging the building to the extent of $50,000. Nothing can be collected from B. The building was insured for nine-tenths of its value, and had the policy with B not expired, $45,000 could have been collected. Of this sum A would have paid $20,000, B, $10,000, and C, $15,000. As it stands, the owner's actual loss will be $15,000.

Marine Insurance.

This insures against the accidents which may happen to a ship, or against the loss or damage of its cargo. There are companies of underwriters in London, New York, and other cities who keep experts in large seaboard cities throughout the world, whose business it is to investigate every ship coming in as to condition and seaworthiness. On the basis of the information received from these experts all ships are classified yearly, and this information is open to marine insurance companies the world over. It is a sort of marine mercantile agency.



By these Presents.

On Cause — John Jones Esq. — on

insured to the sum of — Ten thousand dollars —

lost or not lost, as said from — London — To Philadelphia —

1901 Merchandize Valued at Sum insured per

Ship — Great Eastern — thereof is Master for the present

voyage — — — or whosoever else shall be master of said Vessel, or by whatever other name or names the said Vessel, or Master thereof, shall be named or called. BEGINNING the Adventure upon the said Vessel as aforesaid, and upon the Freight or property, from and immediately following the loading of said property on board said Vessel, and so continue during the voyages aforesaid as the Vessel until she shall be arrived at her port of discharge and there moored in safety and so the freight and property, until the property shall be safely landed. AND it shall be lawful for the said Assured, their factors, servants and assigns, to sue, labor and travel for, in and about the defence, safeguard and recovery of the said goods and merchandizes, and every part thereof, as the charge thereof shall and may from time to time require, as well before any loss happens, as after, for the avoiding, preventing or recovering the property insured to care of agency or charter is as much as to be entitled to a return of premium if abandoned. The Company hereby agrees that the rate therein for the insurance by the Assured or his or their agents, at the rate of Five per Cent (2½) over

— — — TOUCHING the adventures and perils which the said Insurance Company are contented to bear and take upon them, they are of the Seas, *Fires, Pirates, Rovers, Assailing Thieves, Jettisons and also Barratry of the Master or Mariners*, unless the *Assured* or owner or part owner of the Vessel (embezzlement and theft trade excepted in all cases) and such other perils, losses or misfortunes, that have or shall come to the hurt, detriment or damage of the said vessel, freight or property, or any part thereof as may be assumed by this Policy and expressed therein. Provided, and it is expressly agreed, that the Insurers shall not be liable for damage or injury to goods by dampness, or want of flavour, or by being spotted, discoloured, musty or mouldy, unless the same be caused by actual contact of sea water with the articles so damaged. And in case of partial loss by any damage to the goods, cuttery or other hardware, the loss shall be ascertained by a separation of the damaged from the undamaged portion of the damaged package or packages respectively, and the sale of the damaged portion by auction only, and not otherwise, and the net proceeds thereof shall be a fair criterion as to all other merchandize, so far as practicable. And provided also, that the said Company shall not be liable for any claim for, or loss by, seizure, capture or detention, or by any Foreign power, or the consequences of any attempt thereat.

It is also agreed, that Bar Puddle, Rod, Hoop and Sheet Iron, Wire of all kinds, Tin Plate, Steel, Marine Bottom, Wickerware, Willow, manufactured or otherwise, Cheese, Salt, Grain of all kinds, Hemp of all kinds, Fruit, whether preserved or otherwise, Dry Fish, Vegetables and Roots, preserved or otherwise, Rags, Hempen Yarn, Bags, Cotton Bagging and other articles used for Cotton Bagging, Produce, Carriages, Household Furniture, Musical Instruments, Looking Glasses, Glass and Plates, and all articles perishable in their own nature, are warranted by the Assured free from average (except general), unless it happens by stranding, and amount to twenty per cent on the whole aggregate value of such articles. Hemp, Leaf Tobacco, Tobacco Stems, Bread, Indian Meal, Matting and Bones (except in Boats) free from average (unless general) under seven per cent, on the whole aggregate value of such articles. Coffee in bags or bulk, Rice in bags or bulk, Bark, Sugar, Flax, and Sail-yarn, free from average (unless general) under seven per cent, on the whole aggregate value of such articles.

And in case of loss, such loss to be paid to said Assured sixty days after proof of loss, proof of interest and adjustment confined to the Assurers the amount of the premium, or the note given for the premium, if agreed, and no more due to the Company from the Assured, when such note becomes due, being first deducted, and all sums coming due being first paid or secured to the satisfaction of the Assurers—but no loss or average shall in any case be paid under five per cent. on each package, unless general.

Provided always, and it is further agreed, that if the said Assured shall have made any other assurance upon the premises aforesaid, prior in date to this Policy, then this insurance Company shall be answerable only for so much of the amount as such prior assurance may be sufficient towards fully covering the premises hereby insured, without any deduction for the insolvency of all or any of the Underwriters, and shall return the premium upon so much of the sum by them insured as they shall be by such prior assurance exonerated from. And in case of any insurance upon the said premises subsequent to date to this Policy, the Insurance Company shall nevertheless be answerable for the full extent of the sum by them subscribed hereto, without right to claim contribution from such subsequent Assurers, and such Assurers are hereby declared to be precluded from having received, or any more reserve as if no such subsequent assurance had been made.

It is also agreed, that the vessel, be warranted by the Assured free from any charge, damage or loss, which may arise in consequence of seizure or detention, for or on account of any illicit or prohibited trade, or any trade or action contrabband of war, and also free from any charge, damage, risk, or claim, on account of injury to any other vessel or her cargo, arising from collision of the vessel hereby named with such other vessel.

It is further agreed, that in case a total loss shall be claimed for or on account of any damage or charge to the said vessel, the only basis for ascertaining her value, shall be her valuation in this Policy, and if not valued herein, then her actual value at the port to which she belonged at the time of the inception of this risk. And it is also agreed that if the above named vessel, upon a regular survey, shall be declared unseaworthy by reason of her being unmanned or unfit, or incapable of prosecuting her voyage, on account of her being unsound or rotten, then the Assurers shall not be responsible on this Policy, and if a voyage aforesaid shall have been begun, and shall have terminated before the date of this Policy, then there shall be no return of premium on account of such termination of the voyage.

And it is further agreed, that should such vessel be delivered from the said voyage at any port or ports short of the port named in the said voyage, and a continuation for the purpose aforesaid between here and old, the remains of all articles replaced being considered as salvage, and accordingly deducted from the said loss. And instead of deducting one-third from the cost of re-coopering, there shall be allowed two and a half per cent. of the said cost of re-coopering, after deducting the value of the old copper and nails, for each and every month the copper shall have been on the vessel at the time when it is taken off, and if the copper shall have been on forty months or more, the cost of re-coopering shall be wholly excluded. If a technical total loss be claimed similar deductions shall be made from the estimated repairs, and unless the said cost thereof (estimate of salvage thereon) would exceed a moiety of the value of the vessel, after making such deductions, the loss shall be deemed partial only.

It is also agreed, that when the goods insured arrive at this port, no claim for loss or damage shall be allowed, unless the Assured, or consignee, give notice to this Company of the same, within ten days after the landing, and also at any public sale intended to be made in consequence of such loss or damage, at least two days previous to such sale, and that the Company are not liable for loss or damage by rust, breakage, leakage or exposure on goods landed at no sale.

It is also agreed, that no liability is incurred under this Policy for leakage or Molasses or other liquids, unless occasioned by stranding, or collision with another vessel.

It is further agreed, that the Assured shall not abandon in consequence of this part of destination being blockaded, but the vessel shall in such case, have the liberty to proceed to another port not blockaded, which shall be destination of the blockaded port.

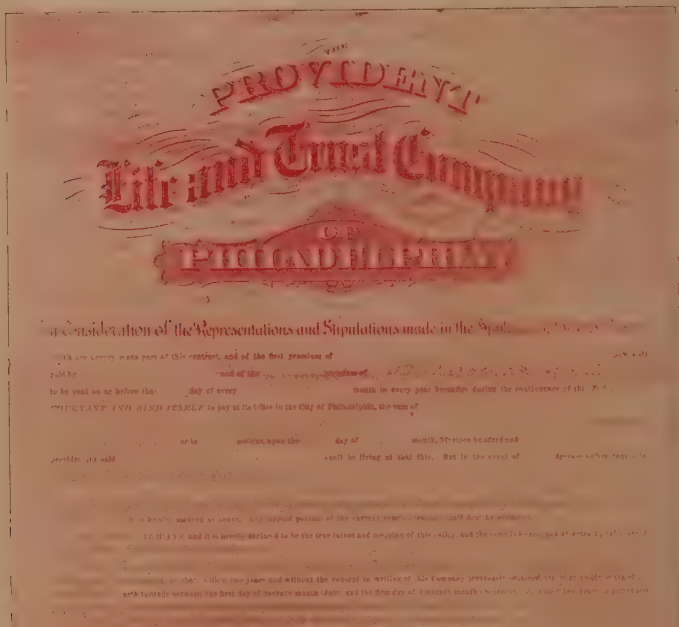
It is also agreed, that in all cases of return premium for short property or over insurance, one per cent. of the return premium shall be retained for the Insurers.

It is also agreed, that no assignment of this Policy shall be valid, unless the premium has been paid or the note given therefor is further secured by a previous endorsement of the names or persons the same benefit and assignment is intended, and unless the consent of the Insurers is first obtained.

In Witness whereof, The Delaware Insurance Company of Philadelphia, By — must their common seal to be affixed to these Presents, in PHILADELPHIA, the Thirty second day of December — one thousand eight hundred and — Attest — Secretary — President — Seal

Proof of Loss to be substantiated by the Survey of the Owners' & Insurers' Surveyors in the State where such Vessels are Owned.

The amount of insurance on a cargo is measured by the invoice value of the commodities, plus the costs of transportation to the place of destination, plus the insurance premium. The insurer of the cargo is not


PROVIDENT
Life and Trust Company
OF
PHILADELPHIA

usually liable for loss through the unseaworthy condition of the vessel. Policies on cargoes are issued for a certain voyage, or from port to port, and on vessels for a specified time or for a certain voyage. The

adjustment of marine losses is on the same principle as the adjustment of fire policies containing the average clause.

Life Insurance.

There is a marked difference between life insurance and other kinds of insurance. The insurance of houses and goods against fire is a contract of indemnity against loss, and in like manner an insurance on human life may be considered as indemnifying a man's family or creditors or others interested against the loss of future income occasioned by death. But it does not necessarily take the value of such income into account, nor does it relate to any intrinsic value of the subject of insurance, which is the life of the insured party. Again, in fire or marine insurance the loss may be only partial, while in life insurance, the loss, if it occurs must be total. And again in life insurance, the event is certain to occur, and the time of its happening is the only contingent element. A person is permitted to insure not only his own life but also that of another, although it is taken for granted that he has some special interest in the life of the insured party, growing out of business or other relationship. The insured party may contract that the sum insured him shall be paid to him during his life, after reaching a certain age. Life insurance has many very important advantages over other methods of saving. It secures to the individual a substitute for the guarantee of life which he can never have, by put-

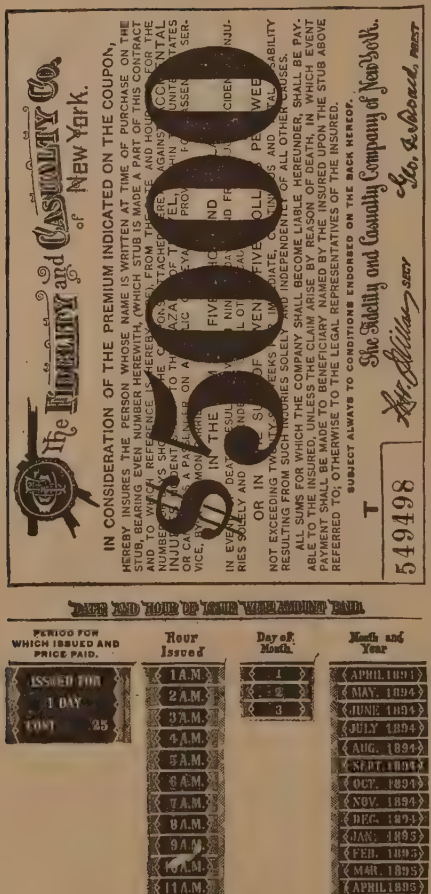
ting him in a condition in which the advantages connected with an average length of life are assured him, and by fixing his services with reference thereto; it keeps him from touching the savings accumulated, by depriving him of control of them; it prevents him from growing negligent in his economy by making him lose all or part of what he has saved if he fails to pay his premiums. The pecuniary means of meeting their obligations are derived by the insurance associations from several sources: first, from the annual premiums which vary according to the conditions of the insurance; secondly, from temporary insurance, lapsed policies, and from the income from judicious investments. Exact information as to the expectation of life at different ages is furnished to a satisfatory degree by statistics. Statistical observations on the rate of mortality at various ages, and on the average duration of life, are tabulated in the mortality tables, which, beginning with a fixed number of persons of the same age, show for each year the proportion of deaths in that number and the expectation of life of the survivors. These tables date back 200 years and the results vary very little. Weak and sickly persons, particularly those suffering from chronic diseases, as well as those engaged in dangerous occupations, are very properly excluded from insurance. The *reserve fund* is an object of great importance to life insurance companies. Those who take out policies for life or for a period of years continue to pay the same annual premium which was fixed with reference to their age at beginning. They ought really to pay a lower premium at first, and as they grow older, a higher one. As a matter of fact they pay in excess of the average rate of mortality and at advanced age their premiums are much below the demands of the advanced-age mortality. To meet this contingency the insurance companies set aside the excesses of the earlier years as a reserve fund, as one of the necessary conditions of a continued existence. The following table of insurance represents the maximum rates of the leading New York companies:

	LIFE POLICIES. Insurance payable at death only.					ENDOWMENT POLICIES. Premiums payable annually for 10 years.			
	Premiums payable annually for				*Single Payment.*	*Insurance payable as stated, or at death if it occur earlier.*			
Age.	*Life.*	*20 years.*	*15 years.*	*10 years.*		*In 20 years.*	*In 15 years.*	*In 10 years.*	*Age.*
25	$19.89	$27.39	$32.34	$42.56	$326.58	$75.39	$87.92	$103.91	**25**
26	20.40	27.93	32.97	43.37	332.58	75.54	88.05	104.03	**26**
27	20.93	28.50	33.62	44.22	338.83	75.71	88.19	104.16	**27**
28	21.48	29.09	34.31	45.10	345.31	75.89	88.34	104.29	**28**
29	22.07	29.71	35.02	46.02	352.05	76.08	88.50	104.43	**29**
30	22.70	30.36	35.76	46.97	359.05	76.29	88.67	104.58	**30**
31	23.35	31.03	36.54	47.98	366.33	76.52	88.86	104.75	**31**
32	24.05	31.74	37.35	49.02	373.89	76.76	89.06	104.92	**32**
33	24.78	32.48	38.20	50.10	381.73	77.02	89.27	105.11	**33**
34	25.56	33.26	39.09	51.22	389.88	77.30	89.50	105.31	**34**
35	26.38	34.08	40.01	52.40	398.14	77.62	89.75	105.53	**35**
36	27.25	34.93	40.98	53.63	407.11	77.95	90.02	105.75	**36**
37	28.17	35.83	42.00	54.91	416.21	78.33	90.31	106.00	**37**
38	29.15	36.78	43.06	56.24	425.64	78.73	90.63	106 28	**38**
39	30.19	37.78	44.17	57.63	435.42	79.18	90.98	106.58	**39**
40	31.30	38.83	45.33	59.09	445.55	79.68	91.37	106.90	**40**
41	32.47	39.93	46.56	60.60	456.04	80.23	91.79	107.26	**41**
42	33.72	41.10	47.84	62.19	466.89	80.83	92.26	107.65	**42**
43	35.05	42.34	49.19	63.84	478.11	81.49	92.78	108.08	**43**
44	36.46	43.64	50.61	65.57	489.71	82.22	93.34	108.55	**44**
45	37.97	45.03	52.11	67.37	501.69	83.03	93.97	109.07	**45**
46	39.58	46.50	53.68	69.26	514.04	83.93	94.67	109.65	**46**
47	41.30	48.07	55.35	71.25	526.78	84.92	95.46	110.30	**47**
48	43.13	49.73	57.10	73.32	539.88	86.02	96.31	111.01	**48**
49	45.09	51.50	58.95	75.49	553.33	87.22	97.27	111.81	**49**
50	47.18	53.38	60.91	77.77	567.13	88.54	98.32	112.68	**50**

Surplus premiums or dividends are returned annually commencing at the payment of the second premium. Policies which do not share in the dividends of the company, are issued at a somewhat lower rate. The above rates are for annual payments only. To obtain semi annual payments, add 4 per cent. and divide by 2. To obtain quarterly payments, add 6 per cent. and divide by 4.

Accident Insurance.

Accident insurance does not date back more than fifty years. We first find mention of a company formed in London in 1849 for insuring against railway accidents. At present there are a great many companies representing much capital which insure against all kinds of acci


The Fidelity and Casualty Co.
of New York.
IN CONSIDERATION OF THE PREMIUM INDICATED ON THE COUPON,
HEREBY INSURES THE PERSON WHOSE NAME IS WRITTEN AT TIME OF PURCHASE ON THE STUB, BEARING EVEN NUMBER HEREWITH, (WHICH STUB IS MADE A PART OF THIS CONTRACT AND TO WHICH REFERENCE IS HEREBY MADE) FOR THE SUM OF
$3000
AGAINST
IN EVERY DEATH RESULTING SOLELY AND INDEPENDENTLY OF ALL OTHER CAUSES.
OR IN THE SUM OF FIVE THOUSAND DOLLARS
NOT EXCEEDING TWO THOUSAND WEEKS, AGAINST DISABILITY RESULTING FROM SUCH INJURIES SOLELY AND INDEPENDENTLY OF ALL OTHER CAUSES.
ABLE TO THE INSURED, UNLESS THE CLAIM ARISE BY REASON OF DEATH, IN WHICH EVENT PAYMENT SHALL BE MADE TO BENEFICIARY NAMED BY THE INSURED UPON THE STUB ABOVE REFERRED TO; OTHERWISE TO THE LEGAL REPRESENTATIVES OF THE INSURED.
SUBJECT ALWAYS TO CONDITIONS ENDORSED ON THE BACK HEREOF.
T
549498
The Fidelity and Casualty Company of New York.
SECY
PRES
DATE AND HOUR OF ISSUE WILL FOLLOW
PERIOD FOR WHICH ISSUED AND PRICE PAID.
ISSUED FOR 1 DAY COST 25
Hour Issued
1 A.M.
2 A.M.
3 A.M.
4 A.M.
5 A.M.
6 A.M.
7 A.M.
8 A.M.
9 A.M.
10 A.M.
11 A.M.
12 A.M.
HOUR ISSUED
1 P.M.
2 P.M.
3 P.M.
4 P.M.
5 P.M.
Day of Month.
1
2
3
Month and Year
APRIL 1894
MAY. 1894
JUNE 1894
JULY 1894
AUG. 1894
SEPT. 1894
OCT. 1894
NOV. 1894
DEC. 1894
JAN. 1895
FEB. 1895
MAR. 1895
APRIL 1895
MAY. 1895
JUNE 1895
JULY 1895

dents for any length of time from one day to ten years. One can buy at any railway station for twenty-five cents an insurance policy taking a $3,000 risk for one day.

Annuity Insurance.

This is almost the opposite to life insurance. The simplest form is that in which the payment of an annuity is assured until death to a person in return for the deposit of a fixed amount of capital. The insured begins to receive the annuity at once or at some later period, usually after reaching a certain age. This class of insurance is more popular in Europe than in America. The American who has capital prefers to take chances for his income on more productive forms of investment.

Other Kinds of Insurance.

The guarantee of employers against the fraud or insolvency of their servants has become of late years of considerable importance. Companies have been formed to insure

merchants against loss by bad debts, and others to insure builders and contractors against accidents to their employees. Almost every conceivable kind of risk is now covered by insurance in some form or other.

Insurance Terms.

The written contract of insurance with its various conditions is termed the *policy*. It contains a description of the property or person therein insured, the cost of the insurance, the amount of indemnity to

be paid, etc. The *premium* is the sum paid by the insured to the insurer for the risk which the latter assumes. In fire insurance the premium is quoted at a certain rate upon $1,000 insurance for one year or for five years. An ordinary dwelling in a good location would be charged from $5 to $7.50 per $1,000 for a period of five years. *Short-rates* are rates for a term less than a year. The *insurance agent* is the person who represents the insurance company. Insurance *brokers* usually represent several companies. An *open policy* is one upon which additional insurance may be entered at different times. Fire insurance companies issue open policies with pass-books attached for convenient entries of merchandise in daily transportation. Open policies covering all risks are issued to importers who do not always have a definite knowledge of the time of shipment.

Forms of Life Insurance.

A *straight life* policy is payable only upon the death of the insured and premiums must be continued until death. A *20-year life* policy would be similar to the straight life with the exception that premiums would cease after 20 years. *Endowment* policies are payable at death or at the end of a fixed period to the full extent of the amount insured. *Tontine* policies entitle the holders to a *pro rata* distribution of the excess tontine (lapsed) premiums paid during that period.

Insurance Law.

It is generally necessary to get the consent of the first company before an insurer can take out a second policy elsewhere. This is not true of life insurance. Any person may insure his own life or property in favor of any one he chooses. A creditor may insure a debtor's life up to the amount of the debt. Any interest in property gives a person possessing such interest the right to insure it, whether he is the true owner or not. A warranty is a statement of fact made by the insured and contained in the policy. If it is incorrect or untrue, the policy is void, and the insured cannot recover his loss, though he has paid his premiums. A false age given in a life-policy, for instance, makes it absolutely void. It is often agreed that if the building insured ceases to be occupied the policy is to be considered suspended. It is, therefore, unwise to leave an insured building vacant. It is generally necessary for the insured to take great care in connection with the heating and lighting arrangements. Extensive alterations in an insured building should not be made without notifying the company. It is often necessary to notify the company if an insurance policy is assigned as

collateral security for a debt. The balance of the insurance in such a case would go to the original owner. There is generally a provision in fire policies that unless proofs of loss are filed in the office of the company within sixty days after the fire, the company will not be liable.

Lloyd's.

The name *Lloyd's* is similar in its significance to *Bradstreets* It is a society composed of underwriters and others interested in shipping. This society has agents in all the seaports of the world to report upon vessels—their arrivals, departures, accidents, sea-worthiness, etc. Lloyd's originally was a coffee house (kept by Edward Lloyd) conveniently situated for merchants and shippers. Thus the custom of meeting for business grew up there and more than 200 years ago a corporate society was formed. Lloyd's is now the most important shipping bureau in the world.

EXAMINATION QUESTIONS.

1. Give some account of the history and development of the insurance business.

2. To what extent is insurance a compulsory element of the government of Germany and other European countries?

3. How is it possible for insurance companies, especially those doing a *life* and *accident* business, to estimate in advance with any degree of accuracy their losses?

4. Enumerate a few of the many systems of insurance now in operation in this country.

5. Distinugish between *mutual* and *industrial* companies.

6. Why is it that the mutual insurance company needs no capital stock? Give instances of mutual companies.

7. Name three leading

1. life insurance companies.
2. fire insurance companies.
3. accident insurance companies.

8. What is the *surplus fund* of an insurance company? How is it applied in mutual companies? How in industrial?

9. What is the *policy*? What is the *premium*?

10. The death rate of a community or nation is doubled. How will it affect (1) mutual life policy holders, (2) industrial life policy holders?

11. What is necessary, when a fire occurs, to secure the insurance?

12. Quote the average clause usually found in fire insurance policies.

13. Goods worth $50,000 are insured for $20,000 and are damaged by fire to the extent of $30,000. Will the company be obliged to pay the full $20,000?

14. How do marine insurance companies secure ratings as to the seaworthy character of vessels?

15. Is it customary to insure a ship's cargo for more than its value?

16. Enumerate some of the economic advantages of life insurance.

17. From what is the income and resources of a life insurance company usually derived?

18. From the table given find the quarterly premium for a $5,000 life policy payable in 10 years taken at the age of 48.

19. Distinguish between *annuity* insurance and *life* insurance.

20. What general name is given to insurance company associations?

21. Distinguish between "straight" life and endowment policies.

22. What is meant by *tontine* as this term is applied to life insurance?

23. A building is valued at $400,000. It is insured in A for $20,000, in B for $30,000, in C for $40,000, and in D for $60,000. A fire damages the building to the extent of $10,000. How much will D be required to pay? If the building were totally destroyed how much would A be required to pay?

24. Stock valued at $40,000 is insured for $12,000. It is damaged by water to the extent of $4,000. Find the loss.

25. A dry goods house had stock on hand January 1, valued at $500,000. Expect average profit of 20 per cent. Bought between January 1 and July 1 $100,000. Salesbook shows sales of $360,000. Stock insured January 1 for $400,000. Burned July 1; one-half totally destroyed; balance damaged fifty per cent. Find the owner's loss.

26. The following items are taken from the yearly statement of a life insurance company:

Stocks and Bonds, $103,705,308.67; Policy Reserve, $139,620,188.00; Surplus due Policy Holders, $20,249,307.73; Unpaid dividends, $147,437,07; Loans on Policies, $4,231,852.93; Accrued Interest Receivable, $,405,663.08; Premiums paid in advance, $157,415.68; Real Estate Sinking Fund, $200,000; Loans on Collaterals, $579,922.00; Premiums due, $5,571,397.74; Mortgages, $26,349,724.84; Real Estate, $14,675,478.98; Death Claims due, $1,550,382.62; Policy Trust Fund. $87,039.83.

Arrange these items in a statement showing assets and liabilities which should balance.

27. How is the name *Lloyd's* associated with marine insurance?

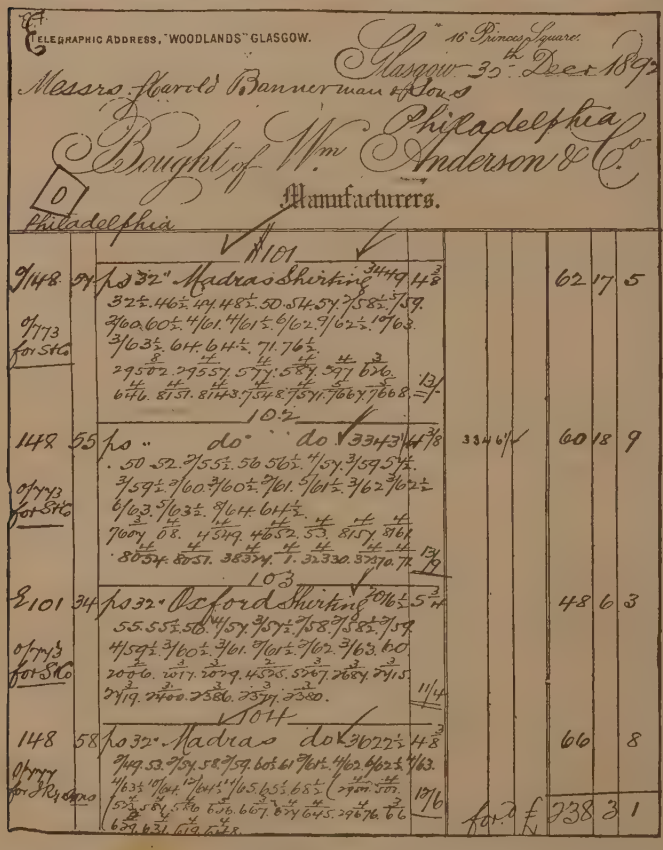
Importing, Exporting, Shipping, and Warehousing.

Foreign Commerce.

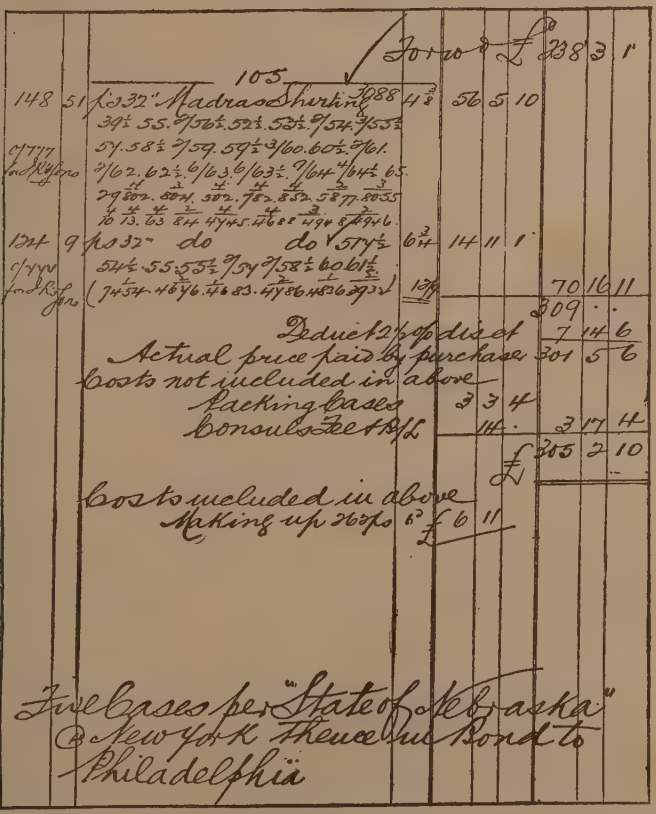
Commerce primarily means the interchange of property. We, however, call local commerce, *business*, and the general term is applied more to our trade with other nations. Commencing in the earliest ages, commerce extended as nations grew in intelligence and civilization. It has vastly increased during the last half-century. More than 2,000 years ago the Phœnician and Carthaginian traders visited England and carried away tin from Cornwall, bringing in exchange earthenware, brass manufactures, and salt. Modern commerce necessitates the existence and employment of numerous classes of people and a vast machinery of conveyance and communication. The entire world is the field of the modern merchant. He buys raw and manufactured products wherever he can buy cheapest and he ships to whatever market pays him the highest price. Our corner grocer or produce dealer may furnish us with beef from Texas, potatoes from Egypt, celery from Michigan, onions from Jamaica, coffee from Java, oranges from Spain, and a hundred other things from as many distant points, and yet so complete is the interlocking of the world's commercial interests and so great is the speed of transportation that he can supply us with these necessaries under existing conditions more easily and readily than if they were all grown on an adjoining farm.

Chambers of Commerce.

Chambers of Commerce and *Boards of Trade* are voluntary local institutions whose object is to promote the domestic or foreign trade of the cities in which they are located. They collect, classify, and dis-


TELEGRAPHIC ADDRESS, "WOODLANDS" GLASGOW.
16 Princes Square.
Glasgow 30th Dec 1892
Messrs Harold Bannerman & Sons
Philadelphia
Bought of Wm Anderson & Co.
Manufacturers.
Philadelphia
£101
£101
£101

town or city. The funds required to meet the expenses are supplied by regular contributions paid in by members. The boards of trade of American cities have had a large influence in directing the character of the business done in each, and many of our cities owe their large

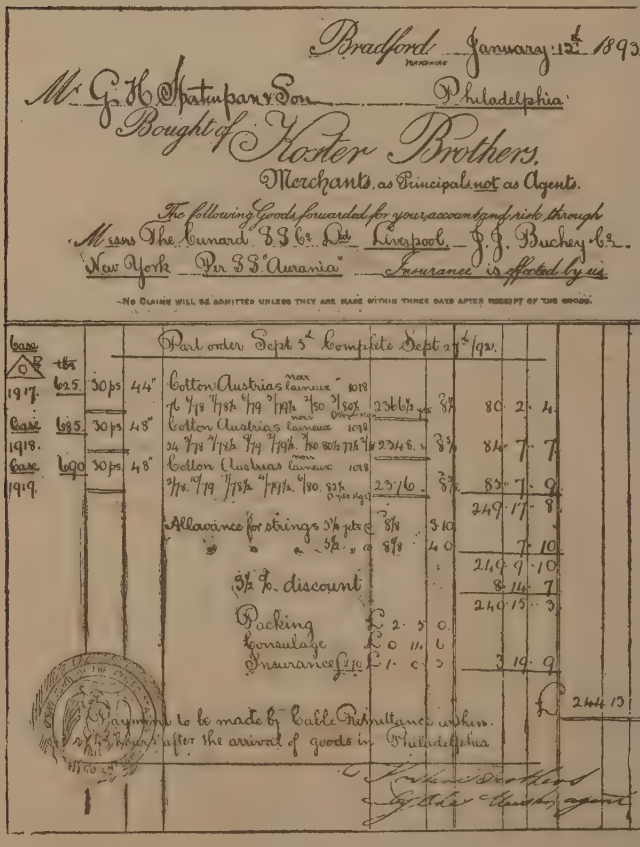


and speedy growth to the immediate influence of enterprising and progressive boards of trade.

Customs Duties.

The taxes levied upon merchandise imported or exported are commonly called customs duties. They have always formed one of the

most important sources of revenue in all civilized nations. We know that the Athenians derived a considerable revenue from their customs. They levied a duty of two per cent. on all exports and imports at Athens. Under the name of *portoria*, customs duties were levied at



Bradford Yorkshire January 12th 1893.

Mr. G. H. Statuham & Son Philadelphia

Bought of Foster Brothers.

Merchants, as Principals not as Agents.

The following Goods forwarded for your account and risk through Messrs The Cunard S.S. Co. Ltd Liverpool. J. J. Buckey Esq. New York Per S.S. "Aurania" Insurance is effected by us

NO CLAIMS WILL BE ADMITTED UNLESS THEY ARE MADE WITHIN THREE DAYS AFTER RECEIPT OF THE GOODS.

Part order Sept 5th Complete Sept 21st 1892.

Case 1917.	625.	30 ps	44"	Cotton Austrias Laineux nar 1018 76 7/18 7/18¼ 7/19 7/19½ 7/20 7/20½ non 1018	2366½ yds	8½	80	2	4
Case 1918.	635	30 ps	48"	Cotton Austrias Laineux non 1018 24 7/18 7/18½ 7/19 7/19½ 7/20 7/20½ 7/21 7/21½ non 1018	2348 "	8½	84	7	7
Case 1919.	640	30 ps	48"	Cotton Austrias Laineux non 1018 7/18 7/19 7/19½ 7/20 7/20½ 7/21 7/21½ non 1018	2376 "	8½	83	7	9
							249	17	8
				Allowance for strings 5¼ pcs @ 8/8		3	10		
				" " 5½ " @ 8/8		4	0		
								7	10
							241	9	10
				5½ % discount				8	14	7
							240	15	3
				Packing £ 2 5 0					
				Consulage £ 0 11 6					
				Insurance £10 £ 1 0 0				3	19	9
							£	244	15	0

Payment to be made by Cable Remittance within after the arrival of goods in Philadelphia

Rome at so early a date in her history that we have no record of their introduction. So universal did these duties, local and national, become, that every continental nation was fairly covered with a net-work

of customs lines. The most ancient customs in England consisted of fees paid by the merchants for the privilege of using the king's warehouses, weights, and measures. The *excise* was first levied in Holland

(Form No. 138.)

Declaration to be made by the Seller on behalf of the Purchaser where Merchandise has been actually Purchased.

I, Gregor McGregor in Scotland, do solemnly and truly declare that I am agent for the seller and shipper of the merchandise mentioned in the annexed invoice mentioned and described which was purchased from* H. Anderson by Messrs Hyatt Anderson & Co of Philadelphia, in the United States; that the said invoice was made at Glasgow, in the consular district of Glasgow, whence the said Merchandise is to be exported to the United States, and that it is in all respects true; that it contains a true and full statement of the time when, the place where, and the person from whom the merchandise therein mentioned was purchased, and the actual price paid, or to be paid, to* us by the purchaser, to whom* we have sold the same in the ordinary course of trade, and for whom I now act in producing this invoice, together with a true statement of the quantity thereof, and of all charges thereon; that no discounts, bounties, or drawbacks are contained in the said invoice but such as have been actually allowed thereon; that the currency in which the said invoice is made out is the currency which was actually paid, or is to be paid, for the said merchandise; and that no different invoice thereof has been or will be furnished to any one.

I further declare that it is intended to make entry of the Merchandise mentioned in the said invoice at the port of In Bond to Philadelphia in the United States of America.

And I make this solemn declaration, conscientiously believing the same to be true, and by virtue of the provisions of an Act made and passed in the sixth year of the reign of His late Majesty King William the Fourth, intituled, "An Act to repeal an Act of the present Session of Parliament, intituled an Act for the more effectual Abolition of Oaths and Affirmations taken and made in various departments of the State, and to substitute Declarations in lieu thereof, and for the more entire suppression of voluntary and extra-judicial oaths and affidavits, and to make other provisions for the abolition of unnecessary oaths."

Declared at GLASGOW, in the County of LANARK, SCOTLAND, the 31 day of December 1862 before me

Gregor McGregor

Notary Public.

(Form No. 140.)

I, LEVI W. BROWN, Consul of the United States at Glasgow, do hereby certify that at Glasgow, on this 31 day of December A.D., 1862 the within Invoice, No. 4579 in which are mentioned and described certain Merchandise, to wit:—

Cotton Shirtings

amounting with the charges thereon, to the gross sum of £ 305-2-10 was produced to me by Gregor McGregor in person, who thereupon declared in writing in my presence that entry of said Merchandise was to be made at the Port of In Bond to Philadelphia in the United States of America.

I do further certify that I am satisfied that the person making the declaration hereto annexed is the person he represents himself to be, and that the price stated in said invoice represents the actual market value or wholesale price of the Merchandise described in the said invoice in the principal markets of the country at the time of exportation, excepting as noted by me upon said invoice, or respecting which I shall make special communication to proper authority.

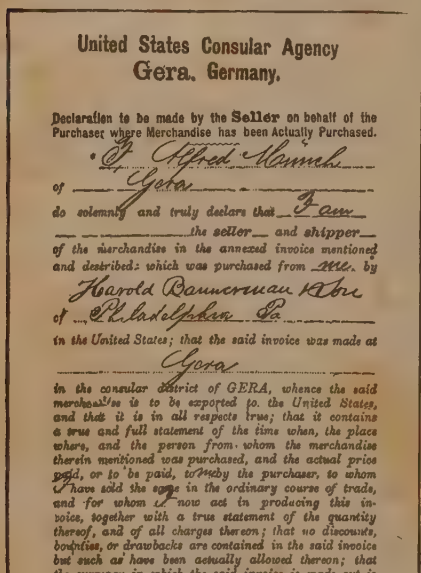
Witness my hand and seal of Office, at GLASGOW the day and year aforesaid.

Consul of the United States.

Received Fee, £2.50

as a war tax. In the United States this form of tax is called *internal revenue* and is levied by means of affixed stamps upon tobacco and liquor. We import about a billion dollars worth of merchandise annually, and export slightly more. The value of our *in-transit trade*,

that is, of foreign merchandise brought to this country for immediate shipment from its ports or across the country to other foreign countries, amounts to over fifty millions of dollars annually. The term *entry for consumption* is the technical name of the import entry made at the custom house and does not imply that the goods are actually to be consumed, but simply that they have been delivered into the custody of the importer and that the duties have been paid on the dutiable portion. The values of *imported* articles are their values in the foreign markets from which they are imported, or rather the foreign shippers' invoice value. The cost of freight from the last foreign port whence they were shipped to the United States is not included in their dutiable value. The commissions of commission men and importers are not deducted before the duty is charged. The *foreign export value* of commodities exported from a bonded warehouse is the value which they bore in the foreign markets whence they were imported to the United States, that is, their import value. This name is given to distinguish this class of exports from what are known as *domestic exports*, that is, exports of produce or goods grown or manufactured in the United States.



United States Consular Agency
Gera, Germany.

Declaration to be made by the **Seller** on behalf of the Purchaser where Merchandise has been Actually Purchased.

I, Alfred Mannel
of Gera
do solemnly and truly declare that I am
the seller and shipper
of the merchandise in the annexed invoice mentioned and described; which was purchased from Mr. by
Harold Bauermann & Son
of Philadelphia Pa
in the United States; that the said invoice was made at
Gera
in the consular district of GERA, whence the said merchandise is to be exported to the United States, and that it is in all respects true; that it contains a true and full statement of the time when, the place where, and the person from whom the merchandise therein mentioned was purchased, and the actual price paid, or to be paid, therefor by the purchaser, to whom I have sold the same in the ordinary course of trade, and for whom I now act in producing this invoice, together with a true statement of the quantity thereof, and of all charges thereon; that no discounts, bounties, or drawbacks are contained in the said invoice but such as have been actually allowed thereon; that the currency in which the said invoice is made out is the currency which was actually paid, or is to be paid, for the said merchandise; and that no different invoice thereof has been or will be furnished to any one. I further declare that it is intended to make entry of the merchandise mentioned in the said invoice
at the port of New York
in bond to Philadelphia
in the United States of America.

Dated at Gera, this 21st day of December 1892

Alfred Mannel
By Wm. Mannel Jr.
Agent

J. 61 Wa. etc.

How Goods Are Imported.

Large orders for foreign goods are sent to European houses either direct by correspondence or through New York commission merchants who make a specialty of import trade. The largest American importers have men whom they call their *foreign buyers*. These go abroad at certain seasons and make purchases direct from European houses. They simply buy the goods, that is, order them, and leave the shipping and all the routine connected therewith to the seller. When the goods are ready for shipment, the foreign house makes out an invoice—three copies. These are taken to the office of the nearest United States Consul and an oath is taken to the effect that the particulars and prices are absolutely as stated. This precaution is to prevent fraud. A foreign merchant might be in collusion with an American importer and invoice goods at a value lower than their actual price to reduce the amount of duty to be paid at the American port of entry. The Consul files one copy of the invoice; the second he sends to the custom house where the goods are to be entered; and the third is returned to the shipper. The cases are forwarded to the seaport town where a bill-of-lading, also in triplicate, is issued by the ship or her agents. The invoice, the bill-of-lading, and the Consul's certificate are mailed to the consignee at the port of destination. Upon the arrival of the goods the consignee usually takes the papers to his custom house broker, who for a moderate fee does the necessary routine work of *passing the goods* at the custom house. The consignee may save this expense by attending to the matter himself but usually he finds it a saving of expense as well as of time to allow a broker to do the work for him. If he wishes to pay the duty immediately he makes what is known as a *cash entry*. If he does not require the goods immediately he may make a *warehouse entry*. When the latter is done the duty need not be paid until the goods are taken from the bonded warehouse. The cases may be taken in lots at different times at the convenience of the importer. In the entry of goods for a bonded warehouse the government requires a bond from the importer, with a surety that he will pay the duty within three years, or export the goods to some other country. When goods are consigned to the interior of the United States, that is to cities or towns which are not ports of entry, the goods can be sent from the port of shipment to the port of entry, and then forwarded *in bond* to the point of destination. The invoice, bill-of-lading, and other papers are sent to the custom house broker at the port of arrival where the custom house entries are made and the

goods trans-shipped. The bill-of-lading should read "In bond to ——" wherever the destination may be.

Examination of Goods.

When the goods are discharged from the vessel they are sent to what is known as the United States appraiser's stores for examination.

Duplicate

Invoice No. 956.

United States Consular Agency
Gera, Germany.

Form No. 140

I, Charles Neuer, Consular Agent of the United States at Gera, do hereby certify, that at this Consular Agency on this 9th day of December A.D., 1892, the within invoice, No. 956, in which are mentioned and described certain

Woollen dress goods

amounting, with the charges thereon, to the total sum of Mk. 2447,60 *was produced to me by*

Rich. Manes berger

in person, the agent of the seller and shipper who thereupon declared in writing in my presence that entry of said merchandise was to be made at the port of New York in bond to Philadelphia in the United States of America.

I do further certify that I am satisfied that the person making the declaration hereto annexed is the person he represents himself to be, and that the prices stated in said invoice represents the actual market value or wholesale price of the merchandise described in the said invoice in the principal markets of the country at the time of exportation, excepting as noted by me upon said invoice, or respecting which I shall make special communication to proper authority.

(L. S.)

GERA, GERMANY.

Shipper: Alfred Nünch
(Absender)
Gera, Reuß

Receiver: Arnold Bauermann & Son
(Empfänger)
Philadelphia, Pa.

Contents: Woollen dress goods
(Inhalt)

Quantity: 1 case
(Anzahl der Colli)

Mark: A M 1046
(Zeichen)

Value: Mk. 2447,60 ₰
(Betrag)

Port of Shipment: Bremen
(Verschiffungs-Hafen)

Port of Entry: New York
(Einfuhr-Hafen)

In Bond to Philadelphia
(Unter Zollverschluss nach)

Destination: ——
(Bestimmungsort)

Witness my hand and seal of office at GERA, the day and year aforesaid.

Charles Neuer

Consular Agent of the United States of America.

Fee of $ 2.50 received

Here the examiners have the cases opened and compare the goods to see if they correspond with the invoices, and that the prices are correct. Should the appraiser deem the goods rated wrong, he returns the invoice to the collector's office where the matter is adjusted, and notice of the additional duty necessary is sent to the

importer. Should the importer consider that he has been unfairly

TELEPHONE CONNECTION.

OFFICE OF

J. J. Buchey & Co.

Custom House and Forwarding Agents,

NOTARIES PUBLIC.

No. 57 Beaver Street, NEW YORK — No. 404 Library Street, PHILADELPHIA.

PASSPORTS.

Philadelphia Jan 21st 1893.

M. Lea & C. Boericke's Son

Your ENTRY per State of Nebraska & R.R.

from Liverpool N.Y. is now ready

"Statement."

Dyed Cotton 12002 yds @ 5½d = £660.11

" " £302 " 45% = £135.9.0

£796.0.1

Paid

1/25/93 J. J. Buchey & Co

O 101/105. per H. Houghton

Please call at our office before 3 o'clock, on 21st inst. and complete same, as vessel obtains General Order upon that date.

Yours very respectfully,

J. J. BUCHEY & CO.

404 LIBRARY STREET.

treated he has redress by formal protest to the board of government appraisers. If this board decides against him he can sue

the collector and bring the matter before the United States Court.

733

TELEPHONE CONNECTION.

OFFICE OF

J. J. BUCHEY & CO.

CUSTOM HOUSE AND FORWARDING AGENTS,

NOTARIES PUBLIC,

No. 404 Library St., PHILADELPHIA. No. 57 Beaver St., NEW YORK

—PASSPORTS—

Philadelphia, Feby. 16th 1893

Messrs. GEO. H. OBERTEUFFER'S SON,

Your Cash ENTRY per S/S State of Nebraska arrived Jan. 12th 1893 has been liquidated as follows

"STATEMENT."

Dyed cotton cloth 150/200 threads - under 12½ cyd.	12002 sq yds.	@ 5½¢ =	$660 11
Dyed cotton cloth 100/150 threads - over 12½ cyd.	$232	- 40% =	92.80
Dyed cotton cloth 150/200 threads - over 12½ cyd.	$70	@ 45% =	31.50
			$784.41.
		Duty Paid	796.01.
		Refund	$11.60.

◇ 101/105
Philada.

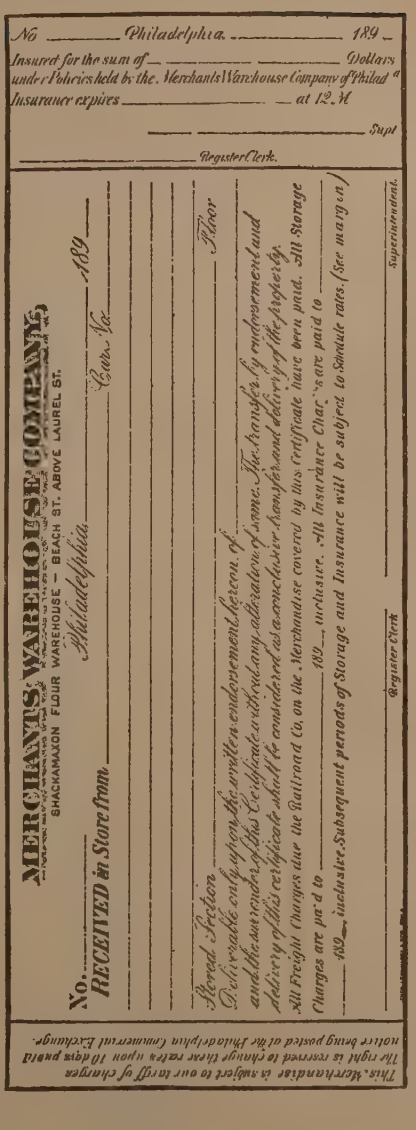
Should you discover any error in the above liquidation, kindly notify us before 2/25/93 after which time, corrections, alterations or protests cannot be made.

Yours Very Respectfully,

J. J. BUCHEY & CO.,
404 LIBRARY STREET.

Should the appraiser consider that the goods have been invoiced at too low a figure he can advance the same to what he considers

right. If this advance is over ten per cent. a penalty fine (as may be prescribed by law) is charged, and if the advance is over forty per cent. the case is presumed to be one of fraud, and the goods may be confiscated. Every entry has to be sworn to by a member of the importing firm, before the collector or one of his deputies. If it is not convenient for a member of the importing firm to do this, then his agent who holds power of attorney, makes oath, and gives a bond for the production of the importer's declaration at some subsequent time. When a consignee receives his bill-of-lading, but no invoice, he can, where the value is less than $100 make what is known as an *appraisement entry*, but where the value exceeds $100, and he knows the contents and prices, he can make out a *pro-forma invoice*, giving a bond to the government for the production later of a proper certified invoice.


No. _____ Philadelphia. _____ 189_
Insured for the sum of _____ Dollars
under Policies held by the Merchants Warehouse Company of Philad'a
Insurance expires _____ at 12 M
_____ Supt
_____ Register Clerk.
MERCHANTS' WAREHOUSE COMPANY
SHACKAMAXON FLOUR WAREHOUSE — BEACH ST. ABOVE LAUREL ST.
No. _____
RECEIVED in Store from _____
Philadelphia, _____ 189_
Cert. No. _____
_____ Floor
Rec'd. Section _____
Deliverable only upon the written endorsement hereon of _____
and the surrender of this Certificate, without any alteration of name. Each transfer by endorsement and delivery of this certificate shall be considered as an exclusive transfer and delivery of the property.
All Freight Charges due the Railroad Co. on the Merchandise covered by this Certificate have been paid. All Storage Charges are p'd to _____ 189_ inclusive. All Insurance Char's are paid to _____
_____ 189_ inclusive. Subsequent periods of Storage and Insurance will be subject to Schedule rates. (See margin.)
_____ Register Clerk
_____ Superintendent.
This Merchandise is subject to our tariff of charges
The right is reserved to change these rates upon 10 days' paid
notice being posted at the Philadelphia Commercial Exchange.

Storage and Warehousing.

Warehousing is a very important industry of large cities. There are hundreds of large warehouses for the storage of furniture and valuables. The rates for large articles are usually a fixed price per month for each cubic foot of space occupied. These storage companies usually have large vans which are hired for moving household effects. Perishable products such as meats, vegetables, etc., are often

MAX RIEDEL.
No. 862 BROADWAY,
NEW YORK

New York, January 11 1893

Messrs. Harold Bannerman & Son, Philadelphia.

Debt.

to **Alfred Münch, Gera:**

for freight from Gera to Hamburgh	Mk	15.40
" " Hamburgh New York	"	36.50
" Insurance from Gera to post	"	15.35
" Counsel's fees	"	10.70

to **Max Riedel, New York:**

for Commission & Expenses on cases № 1056		
4 % on net Mk 2433.70		97.35
	net Mk	175.30

Please include this amount in your remittance against cases № 1056
to Alfred Münch, Gera, Reuss. Max Riedel

stored in cold-storage warehouses where the temperature is kept at all times a little above the freezing point. Railroad and transportation companies have warehouses for storing freight. Besides these, there are government and private *bonded warehouses* for storing goods received from foreign countries. These have a double advantage to the importer. He need not pay the duty until he wishes to remove the goods, or he can negotiate his warehouse receipt, or in other words

raise money on his goods without their removal, if he is in need of ready cash and is waiting for a profitable market. Bonded warehouses, both those owned by the government and by private companies, are under the control of custom house officials known as government storekeepers. The storekeeper carries the keys and no goods can be removed without his consent which is given only upon order from the custom house, and not then unless the storage charges have been paid. Only goods which are dutiable go into bonded warehouses. The *warehouse receipt* given by private warehouse companies is a negotiable instrument and may be used with banks as collateral security for money borrowed, or the goods stored may be sold and the storage receipt *passed* from the seller to the buyer just as would a deed or other instrument of value. The storage rates vary greatly. The space occupied and the labor of handling are the most important considerations. Flour, for instance, would cost about 3c. a barrel for the first 30 days, and 2c. a barrel for each succeeding 15 days. If a rate were quoted as 10 and 8 it would indicate 10c. for storage and 8c. for labor for the first period of time, and 10c. for each successive period. When the goods are being unloaded the ship-master gives a ticket with particulars of the goods to the driver of the bonded dray. Upon delivery of the goods to the warehouse this ticket is turned over to the storekeeper who delivers it to the custom house. The importer receives a *delivery order* for each lot of goods stored. These orders may be exchanged for a warehouse receipt just as railroad receipts may be exchanged for a bill-of-lading. The holder of the warehouse receipt has a title to the merchandise it represents. They may be transferred by endorsement. The usual form of endorsement is as follows: "Deliver to——— or order, the within merchandise," followed by the signature of the owner. Storage companies do not insure the goods. When the accrued storage charges amount to the value of the goods, the company can get an order from the court for their sale to cover expenses.

How Goods are Exported.

Our export trade has grown to very large proportions. We send millions of dollars worth of raw and manufactured products to all parts of the world. All goods shipped abroad have to be *cleared* at a custom house on a blank known as a *shipper's manifest* which contains a description of the goods shipped. This must be sworn to before the collector of customs or one of his deputies by the party making the ship-

ment or his authorized agent. When this is done the ship's master or the transportation company issues a bill-of-lading as in local shipments.

733

(Cat. No. 657.)

NOTICE TO IMPORTER OF BALANCE IN HIS FAVOR.

FEB -27- PAID

Custom-House, Port of Phila.

COLLECTOR'S OFFICE,

Feb. 16th 189 9

Sir:

The duties on the importation of yours per S/S "State of Nebraska," Jan. 23/93

Master, from

Liverpool

have been ascertained, and there is a balance in your favor, amounting to $ 11 60/100, which can be obtained on application to the Auditor's Office by you or your agent authorized in writing to receipt for the same.

Respectfully yours,

F. J. Crilly

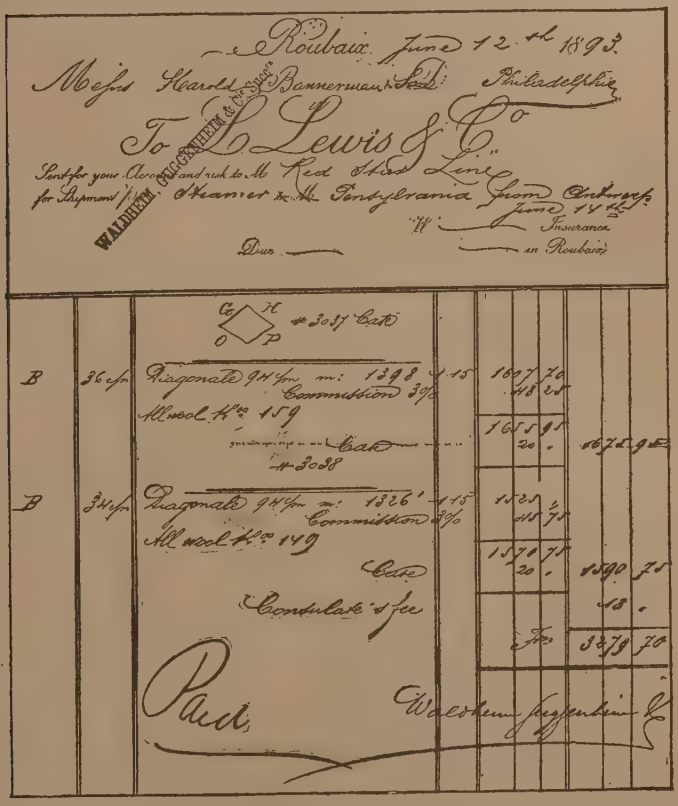
Dpt. Depy. Collector.

To Geo. H. Obenauffer Son

(Ed. 6-19-'91—7,000.)

A ship cannot *clear* for a foreign port until it has properly attested manifests representing its entire cargo. The *manifest* blanks are usu-

ally provided by the ship-transportation company as are bill-of-lading blanks. Goods can be brought into the United States and immediately exported to Canada, without payment of duty, providing the bill-of-lading states "For immediate exportation," or the imported goods may be placed in a bonded warehouse and exported any time within three


Roubaix June 12th 1893
Messrs Harold Bannerman & Son Philadelphia
To L. Lewis & Co
Send for your Account and rule to M Reid Star Line
for Shipment per Steamer Pennsylvania from Antwerp
June 14th
Insurance
Due in Roubaix
WALDHEIM GILCHRIST & Co
B 36 cs Diagonals 94 fm 1398 m 15 160 70
Commission 3%
All wool Nos 159
Cost 165 20 91
B 34 cs Diagonals 94 fm 1326 m 15 152 75
Commission 3%
All wool Nos 149
Cost 157 20 75
Consulate fee 18
Frs 3379 70
Paid
Waldheim Gilchrist & Co

years. The owner of goods on which *import duties* have been paid, is entitled to have such duties wholly or partly paid back if he decides to export the goods to a foreign point. For instance a merchant might import $1,000 worth of goods from England, store them in a New York bonded warehouse and at his convenience export them

Cuba or Brazil or some other country. It is evident that it would be unfair to pay the United States duty when the goods were not for use here. The amount refunded in such a case is called *drawback*, and is fixed by schedule approved by the secretary of the treasury. The claim for *drawback* must be made before the goods are shipped and in such form as the secretary may prescribe. The advantage of this system is easily seen in the fact that it enables our merchants to compete with foreign traders in business outside of our own country.

Competition.

It is really true that competition is the life of trade. If there were but one producer, this producer would take his ease, and would hardly dream of improving either the conditions of his production or the quality of his products. This is too often the case wherever there exists a monopoly. Competition is, therefore, a necessary condition that industry may be kept up and the public well served. Competition is usually disastrous to the dealer who cannot meet his competitors in either price or quality of goods. Imposition and fraud too often usurp the favor which is due to real merit. The public are deceived by gaudy signboards or by fallacious announcements; they are attracted by the bait of cheapness, and are cheated with adulterated products. The competition of trade is always an advantage to an intelligent community. It brings more attractive stores, better goods, lower prices, and usually a more intelligent and careful service. The grocer who has a monopoly of the town's trade allows you to call with your order and carry home your packages; he sells you what he has rather than what you want. With competition, he calls for your order and delivers your groceries, and gets for you what you want whether it pays him or not. Competition is in reality the true motive power of commercial progress. It is also the one sovereign regulator. Things right themselves through competition. The railway charging exorbitant rates "comes to time" when paralleled by another line. It is competition, and competition alone, which puts upon goods their just price. It does this so well, that there is not anywhere, where competition exerts its full power, a single product which sells regularly either for more or for less than its cost of production including a reasonable profit. It is through competition that all the occupations of industry are filled continuously, completely, and in the proper proportion. The number of grocers, or doctors, or teachers must not be very largely in excess of the demand. When the number approaches an excess the trade or profession rights

itself through competition. If there be at any time too much labor for any particular kind of production, the wages for that class of labor declines, and the laborers are thereby warned to seek employment elsewhere. If, on the contrary, there be a scarcity of labor, wages go up, and this is a warning to those who are engaged elsewhere to apply themselves in greater numbers to where the scarcity exists. Thus, by the sole influence of high or low wages, labor is distributed and divided with an almost infallible precision among the different branches of production according to the measure of their needs, and equilibrium is nearly always maintained between the work to be done and the labor assigned to it.

Balance of Trade.

In commerce this term is commonly used to express the difference between the value of the exports from, and the imports into a country. The balance used to be considered favorable when the value of the exports exceeded that of the imports, and unfavorable when the opposite was the trade condition. The attainment of a favorable balance was for many years regarded as an object of the greatest importance. The precious metals, in consequence of their being used as money, were long considered as the only real wealth that could be possessed either by individuals or by nations; and as countries without mines could not obtain supplies of these metals except in exchange for exported products, it was concluded, that if the value of the commodities exported exceeded that of those imported, the balance would have to be paid by the importation of an equivalent amount of the precious metal, and conversely. A very large proportion of the restraints imposed on the freedom of commerce during the last three centuries grew out of this notion. The importance of having a favorable balance being universally admitted, every effort was made to attain it; and nothing seemed so effectual for this purpose as the devising of schemes to facilitate exportation, and to hinder the importation of almost all products, except gold and silver, that were not intended for future exportation. It is now conceded on all hands that the gold and silver are nothing but commodities; and that it is in no respect necessary to interfere either to encourage their importation or to prevent their exportation. The proper business of a wholesale merchant consists in carrying the various products of the different countries of the world from the places where their value is least to those where it is greatest; or, which is the same thing, in distributing them according to the effective demand. It is

clear that there could be no motive to export any species of produce, unless that which it was intended to import in its stead were of greater value. So far as an excess of exports over imports being any criterion of an advantageous commerce, it is directly the reverse and the truth is that unless the value of the imports exceed the value of the exports, foreign trade could not be carried on. Were this not the case—that is, were the value of the exports always greater than the value of the imports—merchants would lose on every transaction with foreigners, and the trade with them would be speedily abandoned. It is almost impossible to compare the real value of the imports with the real value of the exports. The value of an exported commodity is estimated at the moment of its being sent abroad, and before its cost is increased by the expense of transporting; whereas the value of the commodity imported in its stead is estimated after it has arrived at its destination, and, consequently, after its cost has been enhanced by the expense of freight, insurance, importers' profits, etc. In the second place, when a balance is due from one country to another, it is not always evident from the fact that one country is sending gold to the other. The laws which regulate the trade in bullion are not in any degree different from those which regulate the trade in other commodities. It is exported only when its exportation is an advantage, or when it is more valuable abroad than at home. It is next to impossible, then, to tell from the imports or exports, or from the fact that gold is being shipped abroad, whether the *balance of trade* is against or in favor of a particular country.

EXAMINATION QUESTIONS.

1. Distinguish between the terms *commerce* and *business* as these terms are generally used.

2. Enumerate the countries and agencies which contribute to produce a full-course dinner such as might be given at one of our best hotels.

3. We find in every city, institutions known as *boards of trade*, *chambers of commerce*, etc. Give the nature and purpose of such organizations.

4. What are our *internal revenue* taxes and how are they collected?

5. Distinguish between duties for revenue and duties for protection.

6. Distinguish between an *ad valorem* duty and a *specific* duty. Which kind of duty would you expect upon the following: glass; silk; flour; knives; raw wool; furniture; potatoes; wine; books; rice; marble; carpet?

7. What is a "port of entry"?

8. What are the duties of a customs naval officer? of an appraiser? of a custom house storekeeper?

9. Distinguish between *import trade* and *in-transit trade*. What is meant by *entry for consumption*?

10. A of Boston buys in Holland $5,000 worth of china, through a New York agent who charges him 2½ per cent. commission. The goods are entered at Boston where $250 freight is paid. They are immediately exported to Brazil: what is their foreign export value?

11. Give in detail the routine necessary

1. in importing goods.
2. in exporting goods.

12. What are the duties of our foreign consuls with reference to the importation of goods? How may goods be shipped from a point where there is no consul located?

13. What is the business of a *Custom House Broker*?

14. Distinguish between what is known as a *cash entry* of goods and a *warehouse entry*.

15. What is the penalty for incorrectly or fraudulently invoicing imported goods?

16. Give some particulars of the storage and warehouse business of large cities.

17. What are the advantages to the importer of bonded warehouses?

18. Give the particulars in which a warehouse receipt resembles and differs from (1) a promissory note, (2) a bill-of-lading.

19. Describe the form and use of a *ship's manifest.*

20. What is known as a *drawback* in "foreign export trade"?

21. The competition of trade is always an advantage to an intelligent community and usually to the competing houses themselves. Explain.

22. "Things right themselves through competition." Discuss this statement from an economic standpoint.

23. Is it an encouraging or discouraging economic condition when our imports are in excess of our exports? Discuss fully.

24. Find the duty on 100 boxes of plate glass, each containing 16 plates (20x36). Duty 22c. per square foot. (*Ans.* $1,760.)

25. What is the ad valorem duty on 45 boxes of brass nails, 20lb. per box, invoiced at 13c. a lb., duty 45 per cent., and tare 4½lbs. per box? (*Ans.* $40.80.)

MISCELLANEOUS QUESTIONS AND EXERCISES.

1. What are the advantages to the United States commercially of its (1) foreign consuls? (2) the international Postal Union? (3) its census statistics?

2. What city is America's greatest (1) leather market? (2) cotton market? (3) flour market? (4) wheat market? (5) tobacco market?

3. Name and locate the five cities which in your opinion do the largest shipping trade in the world.

4. Of the raw products produced by the United States name the three which are commercially the most valuable.

5. Why do not foreign steamers engage in the carrying trade of the Mississippi?

6. Enumerate the executive departments of the Federal government represented by cabinet officers, and describe the duties of each.

7. Describe the process by which a bill becomes a law in the Federal Congress.

8. S. T. Jacobs makes a deposit of $20 on an order for goods (to be manufactured) which he places with your house. Write a receipt for the money.

9. What is the foreign letter rate? What will it cost to send a book weighing 2½ lbs. and a parcel weighing 1¾ lbs. to Denver? How may money be sent safely by mail? Give particulars.

10. You ship goods by freight and draw at sight on the purchaser; how can you keep control of the goods until your draft is paid? How can you raise money on goods which you have bought and paid for, while they are in transit or in bonded warehouse?

11. Explain what is meant by (1) vouchers, (2) accrued interest, (3) in bond, (4) collateral security, (5) blank endorsement.

12. What is meant by a *trust* as this term is used by manufacturers? How does a *trust* differ from a *syndicate*?

13. Why is it necessary to search the title to real estate? Where are the titles recorded? What are the advantages, if any, to the public, of title insurance companies?

14. How do country banks *clear* their checks?

15. Distinguish between *statute* and *common law*. Explain the meaning of executor, chattel mortgage, lien, attachment, judgment, and trustee process.

16. How does a mortgage differ from a deed?

17. What bookkeeping entries would you make when you pay in cash a time draft by Robson Davids, brought to you for acceptance?

18. You have material from your store valued at $72.23 made up into coats at an expense for labor of $32.90. What entry?

19. You have made three errors in your bookkeeping: 1. You have entered $27.50 on the debit side of expense when it should have been entered on the debit side of merchandise. 2. You have forgotten to charge A with a cash payment of $17.39. 3. You have been charged interest $5.33 and you have entered the amount on the wrong side of the interest account. Which side of your trial balance will be the larger and how much?

20. What great advantages have resulted to society through the introduction of machine methods of production? What evils have arisen from this industrial development?

21. Describe fully the national banking system.

22. Bookkeeping problem: Value of merchandise on hand, Jan. 1, $2,372; bought during the year mdse. costing $1,486 (cash): and bought on credit, mdse. costing $2,432. Cash sales during the year amount to $2,946. Credit sales same time, $2,007. Gross expenses, $494. Accounts against others which cannot be collected, $304. Value of mdse. on hand, Dec. 31 following, $3,270. Make out a financial statement showing the gain or loss.

23. Exchange on London is quoted in Paris at 25.32½ francs to the £, and the London exchange is quoted in New York at 4.89½. Find the value in American money of 5,000 francs.

24. Find the net capital (Jan. 1, 1895) having given the following items: On hand, cash, $3,469. Consignment of mdse. from A valued at $2,000, upon which freight of $93 has been paid. Note made Nov. 15, 1894, at 2 months, for $1,200 with interest at 7 per cent. We shipped mdse. valued at $984 to B, and paid insurance, $23, on Dec. 15, but have not yet received net proceeds. We have rent paid in advance for Jan. and Feb. at $67 a month. We owe a note of $1,700 made Dec. 1, at 60 days, with interest at 7 per cent.

25. What is meant by the *balance of trade* between America and Europe?

26. Draw up an agreement between yourself and Henry Bannerman with reference to some particular venture, or sale, or contract.

27. Write a receipt for borrowed money returnable with interest. Write a receipt in part payment of an account.

28. When does a bill of lading cease to be what is known as a *clean bill of lading?* Give some of the conditions which usually appear on a bill of lading.

29. Describe fully the different methods of sending money to distant points.

30. Describe fully (1) how to send a package by express C. O. D.; (2) how to send a box by freight; (3) how to get a check in your favor cashed at a bank.

31. What is meant by

1. foreclosing a mortgage?
2. discharging a mortgage?

32. You are keeping a business man's cash book. During your temporary absence, and without your knowledge, $5 is stolen from your cash drawer. How will you find this out at the end of the day?

33. Describe fully the different kinds of money in use in the United States.

34. Borrowed $4,000 on Jan. 1, to invest in merchandise. Gross purchases of merchandise during the year $8,426.37, and gross sales $7,246.39. On Dec. 31, I owe accounts (exclusive of money borrowed) amounting to $3,734.25, and others owe me $3,682.76. I have cash on hand, $2,942.48, and mdse. valued at $4,076.21. Make out a statement showing how much I gained or lost during the year.

35. Explain any difference in meaning between the terms: trade and traffic; currency and money; goods and wares; buyer and consumer; commerce and business.

36. Explain any reasons for the great variations in the rate of interests in different classes of investments. Why is money cheaper in London than in New York?

37. The American Express Company's traveler's *cheque* for $20 is quoted as worth £4 1s. 2d. in England, 102.5 francs in France, and

82.5 marks in Germany. Find the value in each of these currencies of a *cheque* for $39.18.

38. A savings bank pays ¼ per cent. per month interest and credits the interest to all accounts on the first day of each month, interest dates from the first of each month and is not allowed for fractional parts of a month. The following is a transcript of Henry Brown's deposits and withdrawals:

Deposits: Jan. 13, $94.16; Jan. 27, $14.86; Feb. 3, $49.03; Mar. 1, $87.24; Mar. 20, $96.37; April 19, $80; July 5, $120.47; Aug. 30, $103.64; Sept. 3, $7.50; Oct. 13, $96.80; Dec. 10, $200.

Withdrawals: Feb. 15, $50; Mar. 13, $15.67; April 21, $100; June 4, $17.80; Aug. 13, $28.30; Oct. 3, $42; Nov. 8, $20; Dec. 24, $100.

How much should Brown's balance be Jan. 1?

39. Describe fully the monetary system of Canada.

40. Enumerate some of the advantages of decimal money systems such as ours over the English system of pounds, shillings, and pence.

41. Are there any *interest* advantages in using instruments of credit instead of actual cash in the mechanism of exchange?

42. What would be the immediate economic effect if every man, woman, and child in the United States were given, say $50,000? Is increase of money increase of wealth?

43. What would be the immediate economic effect if Congress should pass a law making all paper-money in circulation interest-bearing at the rate of 4 per cent?

44. "The currency and credit instruments of a country should at no time exceed in value its real and personal property." Discuss this statement.

45. What European city is recognized as a *clearing* or *adjusting* center for the telegraphic business of the world?

46. Enumerate some of the commercial advantages derived from the general use of checks and other instruments of credit. Is a credit system an advantage or a disadvantage to a community?

47. What are the advantages to the world's commerce of the great expositions held here and abroad?

48. Enumerate some of the advantages which a large business has over a small one.

49. Enumerate some of the business qualifications necessary to success.

1. as a banker.
2. as a manufacturer.
3. as president of a railway.
4. as a retail merchant.

50. What is the commercial or economic effect of the large increase in cities of large department stores?

51. In considering the wealth of a nation would you include (1) public roads? (2) its bank-notes? (3) its foreign credit?

52. Distinguish carefully between what is wealth to an individual, and what is wealth to a nation.

53. Does the payment of wages increase or diminish capital? Would you regard the groceries in your home ready for use as capital? How about the groceries on the shelves at the grocers?

54. Generally speaking does increased population increase wealth? Give illustrations.

55. Note carefully the effect on the price of a particular article of food of each of the following:

1. A very large crop.
2. A very small crop.
3. A larger number of sellers.
4. Fewer sellers.

56. Consider whether wages would be increased by—

1. A successful system of technical education.
2. A large increase in the value of land.
3. A larger number of competing manufacturers.

57. Discuss fully the advantages of Trades Unions and Labor Organizations, such as are common throughout the country.

58. What are the advantages of co-operative industries? Give illustrations.

59. A manufacturer arranges to distribute among his employees ¾ of his profits, after taking 5 per cent. on his invested capital. Wherein does this system resemble, and wherein does it differ from, co-operation? What would be the chief advantages, and what the chief difficulties, of such a plan?

60. "The value of any commodity, of which the supply can be increased, tends towards the cost of reproducing a commodity of equal utility, and this cost depends on the quantity and quality of the labor involved in the production, and on the rate of interest, and the time during which capital is locked up in the production."

Discuss fully this general *law of value*.

61. Analyze as fully as you can the causes which determine the price of peaches at a given time in a given market.

62. Give a definition of *money*. Would you consider bank-notes or checks money? What would be the advantage or disadvantage in the use of wheat as money?

63. Explain what is usually meant by *bimetallism*.

64. To what extent do prices depend upon the productiveness of mines?

65. What is meant by the *appreciation of gold*?

66. What would be the effect upon the industries and finances of the country of discontinuing entirely the use of bank-notes?

67. What would be the immediate effect upon American industries (1) of a harvest equal to double that of an ordinary year? (2) of a great European war?

68. Consider how far credit is an efficient substitute, (1) for money; (2) for capital.

69. What do you consider to be the chief causes and effects of commercial panics? Were there any commercial advantages in the panic of 1893?

70. Why is it that this country imports very largely what it can easily produce in abundance? Give instances.

71. Enumerate some of the economic advantages of an extensive foreign trade.

72. In England the excess of imports over exports is considered a satisfactory feature of her economic condition. In India, which is a British colony, the opposite is true. Account for this.

73. How should you expect the exports and imports of two countries to be affected by the fact that one was able to impose a heavy tribute on the other?

74. How should you expect the rate of exchange between England

and America to be affected by a bad English harvest, assuming that the deficiency was largely made up by importation from America?

75. To what extent should you consider the foreign trade of a country to be a test of its prosperity.

76. What is generally understood by (1) a protective tariff? (2) a tariff for revenue only? Discuss the policy of imposing duties to establish an industry which is expected ultimately to flourish without protection.

77. From an American standpoint consider arguments for and against:

1. The government ownership of railways.
2. Congress fixing wages and hours of labor.
3. Government pensions for all kinds of workers.

78. How do cities make provision for special expenditures?

79. Name the various ways in which a Philadelphia merchant may discharge debts due in Boston, Montreal, London and Calcutta.

80. Why are notes of individuals or of corporations often held in large quantities, in preference to bank notes?

81. Explain the use of the terms *warrant*, *scrip*, *actuary*, *administrator*, *arbitrage*, *bill of stores*, *bond of indemnity*, *bounty*, *charter party*, *composition deed*, *debenture*, *dockage*, *executor*, *notary public*, *salvage*, *voucher*.

82. "The purchasing power of money in the markets of the world is governed by its commodity value." Explain the meaning of this statement.

83. What is meant by *fiat money*?

84. Where is the United States Sub-Treasury located? It is a member of what clearing house association? What advantage does it secure from this membership?

85. Give a brief outline of the National Banking Act of 1863.

SUPPLEMENTARY NOTES.

Prime Exchange.

This name is given to bills issued by houses of known solvency, whose drafts are everywhere accepted, and the character of whose credit is beyond question.

Paper Due Outside the State.

If you hold a note due in another state, deposit it in your own bank for collection, or send it direct to a local bank in the city or town where it is payable.

Buying Goods.

Large houses in the great commercial centers employ buyers who are specialists—men who are thoroughly familiar with the market prices and who know the trade and all its influences through and through. The buyers for large houses are well paid, some of them receiving as high as twenty thousand dollars a year.

Credit Department.

This name is given to that department of a large mercantile establishment which has charge of the credits, that is, which passes upon the credit of its buyers. A well managed credit department does not rely entirely upon the reports of mercantile agencies, but gathers information as to the standing of customers from all possible sources.

Mercantile Agencies.

The two leading commercial agencies of the United States are *Bradstreet's* and *Dun & Co.'s*. These concerns gather from every village, town, and city reports upon the financial condition of every man or firm doing business. A digest of these reports is printed in a very large book which is issued quarterly and sold to subscribers at quite a high price. Nearly all large houses doing a credit business are subscribers to one or both of these agencies. "Should information furnished by an agency, except where obtained from the injured person, be injurious to the credit of a person, and such information be proven to be false, the courts have held that he has a cause of action against the agency for the damage he has sustained through the injury thereby done to his credit. Or should credit be extended upon the strength of information given by a commercial agency, which information was clearly inaccurate, and the agent of such agency could easily have discovered it to be inaccurate, the agency can be held for the damage thereby suffered."

Foreign Commercial Bills.

The price is governed by the condition of the exchange market, and the length of time the bills have to run. Bills payable at sight are purchased at the market rate of exchange, and those payable on time at the market rate, minus the interest considered at the current rate in the country where the bill is payable. The interest-time is the time from the date of purchase to the date of maturity. The interest is deducted when the bill is bought. Time bills usually cost less than their face value.

Charges for Letters of Credit.

A commission of *one* per cent is charged upon all letters not exceeding £500. Interest is allowed when the face of the letter exceeds £1,000. When the face of the letter is not entirely drawn upon, the balance due is payable upon demand at the issuing bank or any of its correspondents.

Value of Standard Coins.

The Treasury Department at Washington issues quarterly a table giving the government estimate in gold of the coins of all countries. This estimate is made simply for the purpose of valuing imports.

Declaring Dividends.

A dividend cannot be declared until the operating expenses, fixed charges, etc., of a stock company have been met. The shareholder is regarded in law as a partner, and therefore the last person entitled to share in the distribution of its assets.

Bondholders.

The student must distinguish clearly between a *bondholder* and a *stockholder*. To illustrate: A buys a quarter interest in a piece of property; he is in a sense, a *share*-holder. B loans money on the property and takes a mortgage as security; the mortgage is a form of bond; he is therefore a *bond*-holder.

Classification of Stocks.

1. Assessable. 2. Non-assessable. 3. Preferred. 4. Common. 5. Cumulative. 6. Non-cumulative.

Assessable Stock.

The holder of assessable stock is liable, upon the failure of the company, to be assessed personally for an amount equal to the amount of the stock which he held

Preferred Stock.

This stock has a preference over other stock in the payment of dividends. The holder is one of the first to share in the net earnings. The dividend is usually stated in the stock certificate; that is to say, the holder of preferred stock carrying 6% dividend will receive his 6%, and share also in the general division of the remainder if it is likely to be in excess of the dividend which he has received as a preferred stockholder.

Cumulative Stock.

When the corporation agrees to pay dividends past due and unpaid before declaring new dividends the stock is said to be *cumulative.* This feature is effective only against subsequent shareholders.

Issue of Bonds.

Bonds can only be issued by the consent and direction of the shareholders of a company, because of the fact that their property becomes mortgaged, making them necessary parties. In the case of railroads, bonds are issued against its road, its branches, its securities, its equipment, its earnings—almost anything in the nature of a security.

First Mortgage Bonds.

These bonds constitute a first lien on the property, as such property exists when mortgaged. *Second mortgages* are payable only after the first mortgages have been met.

Consolidated Mortgage Bonds.

These are issued to take up and fund the prior bonds standing against a property. They are a first lien only upon the retirement of previous liens.

Income Bonds.

These are secured by a mortgage on the earnings of a corporation after the payment of prior claims. They are interest bearing and the interest is payable before any stockholder's dividend can be declared.

Collateral Trust Bonds.

Bonds issued upon collaterals deposited with trust companies giving the trust companies power to sell the collaterals and redeem the bonds upon the failure of the issuer to carry out the conditions of the bonds. These bonds are frequently issued upon the absorption by one corporation of smaller companies.

Debenture Bonds.

This name is commonly given to bonds which have real estate mortgages as collateral security. Debenture bonds frequently contain a sinking fund clause.

Certificate of Indebtedness.

The holder of such a certificate issued by a corporation has a claim upon the assets of the company and if the certificate is not paid within the time named he may apply to the court to have a receiver appointed.

Receiver.

When a property is placed under the management of a receiver, it is in the hands of the court under whose jurisdiction the receivership has been granted. "The rules which ordinarily apply to the financiering of a corporation as regards its stock and bonds may, at the will of the receiver, if approved by the court, be set aside. The receiver operates the property, under the direction of the court, for the benefit of its security holders." Occasionally it is necessary for the court to recommend the issue of *receiver's certificates* for the purpose of raising money for the company. Such certificates take precedence over every other obligation of a company, and for this reason are considered good investment securities.

Officers of Stock Companies.

The duties or powers of officers are usually prescribed by the by-laws of the company. The *president* is usually the chairman of the board of directors. By direction of the board of directors he signs contracts, agreements, etc. He is intrusted with the general management of the company and the employment of its subordinates. The *vice-president* assists the president or acts for him in his absence. The *secretary* is responsible for the records of the company and signs documents with the president. The *treasurer* is the financial manager. The *general manager* acts for the company in its general management.

Active Stocks.

These have separate places assigned to them on the floor of the stock exchange, and when out of the continuous roar of voices we hear a broker call out "five hundred $\frac{7}{8}$ths," we learn the name of the stock from the broker's location on the floor, and know that "$\frac{7}{8}$ths"

is the fraction of a dollar at which the stock is offered, no one considering it necessary, except in case of an unusual rise or fall in stocks, to state the whole number of dollars, as that is presumed to be known by everybody on the floor.

Private Bankers.

The volume of business done by private bankers is very large. The aggregate capital of the New York City national and state banks does not exceed $140,000,000, while the capital of the private bankers of New York City exceeds $450,000,000. The character of the business of private bankers is somewhat different from that of national banks. They lend their capital largely for the promotion of new enterprises, that is, they advance money, and receive in exchange the bonds and stocks of the enterprise promoted; these they dispose of to their customers.

Stock on Margin.

A great deal of stock is bought on *margins*. Some brokers require a larger margin than others, and all brokers require heavier margins on some stocks than on others; while there are stocks that brokers will not handle on margins at all. The amount of margin required is dependent both on the character of the stock and the condition of the money market. Brokers reserve to themselves the right to call for more margin if necessary. As a rule, any of the active stocks can be bought on a ten per cent. margin, with an interest charge of five per cent. on the ninety per cent. which the broker assumes.

Warrant.

The name *warrants* is sometimes given to the drafts drawn by its officers upon the treasury of a corporation.

Scrip.

A dividend payable in stock issued upon the capital of a company is sometimes called *scrip*.

Primage.

A percentage allowed by shippers to the owners or characters of a vessel for the loading of goods is called *primage*.

Notary Public.

A state officer empowered by commission to take acknowledgments, administer oaths, take depositions, and protest negotiable paper, within a certain county prescribed by law.

Actuary.

An expert in the application of the doctrine of annuities, especially with reference to insurance is called an *actuary*. His duties are usually to deduce from statistics, data, mortuary tables, etc., the value of contingent assets, the amount of accruing indebtedness, the proper premium charges, and to furnish statements of the company's condition.

Bounty.

A premium paid by the government to men engaged in certain industries, such as the bounty at one time paid to sugar growers, is called a *bounty;* when paid to steamship or railway companies it is called a *subsidy*.

Call Loans.

Banks lend very large sums of money on call, taking stocks and other similar properties as security. For such loans they charge a very small rate of interest. The money can be called in on very short notice and in case of failure to meet the call the securities are put upon the market and sold. Call loan money is usually money which would if not loaned in this way remain in the vaults of the bank. It may be needed by the bank at any moment and the risk of a long loan cannot be taken.

Reserve Fund.

The national banks in certain large cities are required by law to hold a lawful money reserve of 25 per cent. of their deposits; all other national banks 15 per cent. The 5 per cent. redemption fund is included in the reserve.

Bank Tax.

The national banks pay to the United States a tax of 1 per cent. annually upon the average amount of their notes in circulation, ½ per cent. annually upon the average amount of their deposits, and ½ per cent. annually upon the average amount of capital not invested in U. S. bonds.

Bank Surplus.

The law provides that a surplus fund shall be accumulated, by setting aside, before the usual semi-annual dividend is declared, one-tenth part of the net profits of the bank for the preceding half-year, until the surplus fund shall amount to 20 per cent. of its capital stock.

Hints and Helps for Young Business Men.

Business Experience.

It is stated on good authority that ninety-seven men out of every hundred who engage in mercantile life either fail or go out of business with greatly reduced resources. The statistics of New York City give these figures. If it were possible for business men to use the experience of others the number of failures would be greatly reduced. The only experience, however, that is really worth anything *to us* is our own experience, and as a general rule our experience is valuable only in proportion to its cost—not so much its cost in money, as its cost in effort, and worry, and trial, and hardship, and work. Good advice and intelligent sense can never take the place of actual experience, but they may reduce very largely the cost of experience, and with this idea in view the hints and suggestions given under the heading of this chapter are offered for the thoughtful consideration of young business men.

How to Succeed as a Salesman.

Cultivate a memory for faces and names. Remember that selling ability depends very largely upon common sense. It is not the quantity but the quality of speech which tells. The successful salesman knows how to talk, what to talk about, and more especially when to stop talking. To say the right thing at the right time is not nearly so difficult as to say nothing at the right time. The seller should only talk enough to keep the buyer talking. The faculty of holding trade, or of selling repeatedly to the same people, is the highest attribute in the qualifications of a successful salesman. Understand thoroughly

what you are trying to sell. Know your goods, believe in them yourself, and you are sure to inspire confidence in the buyer. If a salesman cannot bring himself to believe in himself, his house and his goods, he is either very badly placed, or he has mistaken his calling. A conceited, pretentious and affected manner disgusts and repels, while a person whose bearing is simple and natural attracts and makes friends. Remember that he who puts another in the attitude of being a teacher to him pays him a delicate compliment which is generally appreciated. A good salesman seldom asks a man if he wants to buy goods; he doesn't come at him that way. The man who smilingly assents to everything the salesman says does not intend to buy; he is framing an excuse for himself. The eye is the chief medium through which a man fires off whatever personal magnetism he possesses. One who really feels good-will may often infuse it into the heart of another by looking kindly and pleasantly straight into his eyes. There is an old maxim: "When you buy, keep one eye on the goods, the other on the seller; when you sell, keep both eyes on the buyer." The best salesmen of the future will not be illiterate. Education informs the mind, trains the thinking powers, and stamps the face with intelligence. Activity is not necessarily energy or industry. A Westerner says that it does not matter what kind of tracks you leave so long as you get there. This is certainly not true when applied to salesmen. There are cold, bilious, disgruntled people, who can no more be opened out by politeness than oysters. Such can only be reached through their self-interest. The well-dressed man has more self-respect, and commands more than the man in seedy attire. You will sell more goods in five minutes on a bright, busy day, when the store is full of customers, than in an hour on a rainy day, when everything is dull and the merchant gloomy. Faithfulness and trustworthiness are more valuable than intelligence, for they are very much harder to find and can't be bought You can't frighten common sense into anybody, or bulldoze trustworthiness out of him. Your associates should be pure and good, and your personal habits correct. You must be governed by sound principles of morality and religion, without which no true success can be attained.

Failures in Early Life.

The following reference to the secret of a great preacher's success is worthy a place in any publication intended to aid young business men. The preacher is not any more called to preach than the manu-

factûrer is called to make shoes, providing of course, that the shoes are made to wear rather than to sell. Sermons like shoes are too often intended for the market rather than for the individual. It came out in a memorial address to Philips Brooks that his first attempt in real, practical life was a failure. Immediately after his graduation from college, young Brooks obtained a position as usher in the Boston Latin School, but as he did not show the capacity that the principal of the school considered necessary in undermasters, his resignation was demanded. And when Brooks at once turned to preparing himself for the ministry, the school principal predicted his failure on the ground that he had never known any one to succeed in anything else who failed in school-teaching. If that schoolmaster lived twenty years longer, he was doubtless willing to admit that he had made a mistake. And yet his error of judgment was probably fully justified by the lack of power Philips Brooks had shown up to the time he left the Boston Latin School. The capacity that this schoolmaster did not recognize, notwithstanding his long acquaintance with young men, was Brooks's sincere trust in himself and his willingness to persevere and work out the destiny for which he believed nature had fitted him. If he had taken the school principal's opinion as final, and had decided that he had capacity only for ordinary things, he would have sunk into some obscure place and the world would have lost the profit of one of the richest natures that came to it in the nineteenth century.

Philips Brooks persevered, and that is the whole secret of his after success. He had fixed before him a high ideal in life, and he held to it. He refused to let the disappointment of a first essay in life change his plans a particle or influence him to withdraw his gaze from the goal he had in view. Young as he was, he felt that the world could be made better by his living in it and working out the talent with which he had been endowed. Greater than the capacity he displayed as a preacher and nobler than the broad and generous humanity that became so conspicuous in his life, was the perseverance he showed in clinging to his purpose, of refusing to be discouraged by his first disappointment and by the doleful predictions of friends.

There are very few men who have carved out their own lives who will not admit that it was perseverance in the time of failure that made them. Courage, steadiness to purpose and a refusal to surrender high ideals at such a crisis makes it the turning point in a man's life. It is said of the English that they have won in many decisive battles, when the enemy believed themselves the conquerors, simply because they re-

fused to acknowledge that they were beaten. By keeping up the fighting they convinced the enemy that it was they who were beaten and not the English, and the history of the world shows the result of this perseverance. It is the same with men. The man who "keeps up the fighting," no matter how discouraging the circumstances, is sure to win in the end. He may not gain all he hopes for, as no man accomplishes that, but he is certain to gain enough to compensate for his efforts and perseverance. It is not alone to himself that a man owes this duty to persevere. He owes it as much or more to mankind. For every man who elevates himself and works out his ideal the nation is the richer and mankind the better. The early history of almost every successful man is a history of early difficulties and failures overcome by large faith and constant effort. Now and then one gets to the top of the ladder as a result of a happy accident. But, as a rule, especially in this land of ours with its abundant opportunities for all, men achieve it by doing their best at whatever their hands find to do while yet they are unknown. The reason why so many on the lowest round of the ladder never rise much higher evidently is, that they aspire eagerly but neglect to work thoroughly. Men yearn mightily to be rulers over many things, but in the meantime place stumbling-blocks in the path of their own hopes by being unfaithful to the few things. Thousands of men and women are out of employment and yet the supply of first-class ability of whatever sort, be it to sweep a room or preach a sermon, is never equal to the demand.

A Poor Man's Chances.

It is said nowadays that poor men have not the chances that they once had. There is no doubt about the fact that the man who succeeds in the twentieth century will have larger ability and greater faith and stronger purpose than had the successful man of the nineteenth century, but it does not follow that he will require more money. The poor boy has ten chances to secure the necessary educational training to one chance offered the poor boy of fifty years ago. The opportunity always makes the man. He can measure up to the requirements if he has the purpose and ability to do so. A well-known American humorist puts the poor man's chances in a very favorable light as follows: The poor man takes all the chances. We must curtail his chances, and give the rich man a chance. The poor man has crowded the rich man out. But for the poor man, this old world would have cast anchor 6,000 years ago, and be covered with moss and lichens

to-day, like a United States man-of-war. Edgar Allan Poe was the son of a strolling player; George Peabody was a boy in a small grocery; Benjamin Franklin, the printer, was the son of a tallow chandler; John Adams was the son of a poor farmer; Gifford, the first editor of the *Quarterly Review*, was a common sailor; Ben Jonson, rare Ben Jonson, was a bricklayer; the father of Shakespeare couldn't spell and couldn't write his own name; neither can you; even his illustrious son couldn't spell it twice alike; Robert Burns was a child of poverty, the eldest son of seven children, the family of a poor bankrupt; John Milton was the son of a scrivener; Andrew Jackson was the son of a poor Irishman; Andrew Johnson was a tailor; Garfield was a boy of all work, too poor even to have a regular trade; Grant was a tanner; Lincoln a keel boatman and common farm hand; and the Prince of Wales is the son of a queen. It is his misfortune, not his fault; he couldn't help it, and he can't help it now. But you see, my dear boy, that's all there is of him; he's just the Prince of Wales, and he's only that because he can't help it. Be thankful, my son, that you weren't born a prince; be glad that you did not strike twelve the first time. If there is a patch on your knee and your elbows are glossy, there is some hope for you, but never again let me hear you say that the poor man has no chance. True, a poor lawyer, a poor doctor, a poor printer, a poor workman of any kind, has no chance; he deserves to have none, but the poor man monopolizes about all the chances there are.

Stick to a Legitimate Business.

Well directed energy and enterprise are the life of American progress, and safety lies in sticking to a legitimate business. No man—manufacturer, trader, banker—has any more right to be so energetic and enterprising as to take from his legitimate business the capital which it requires to meet an emergency. Apologies are made for firms who have failed, by recurring to the important experiments they have aided, and the unnumbered fields of enterprise where they have freely scattered their money. We are told that individual losses sustained by those failures are as nothing compared with the benefits conferred on the community by their liberality in contributing to every public work. There is little force in such reasoning. A man's relation to a creditor is different from his relation to the public. The demands of the one are definite; the claims of the other are just what the ambition of the man may make them. The histories of successful men unite in exalting the

importance of sticking to a legitimate business. Failures are too often the result of branching out into fields outside of one's experience. The more a business man spreads himself the thinner the spread.

A Millionaire's Pointers.

Nothing is so hard as to make a fortune dishonestly. Things slowly attained are long retained. Buy nothing unnecessary, no matter how cheap. Don't overwork to gain $200 and then spend $500 in regaining your health. Do your best every time, even in small matters. Incur no responsibility which you cannot meet without distress. When you open one hand to secure a new customer, be sure not to allow an old customer to escape from the other hand. The easiest way in all the world to get a dollar is to earn it. When you seek to obtain credit in excess of the amount of your capital, you have crossed the prudent line which divides business from speculation. Mr. Depew is reported to have said that he wouldn't stay awake an hour any night to make a hundred dollars but he would stay awake an hour every night for a week rather than lose a hundred dollars. Men fail because they lose money not because they are unable to make it. Any man of ordinary ability can make money.

Business Location.

In retail trade the location is a very important matter. Trade centers around centers. People do not like to go out of their way to buy things. An inferior or small store in a good location is preferable in every way to a fine large store poorly located. Just a little around the corner is not so good as on the corner. Two or three steps up is not so good as on a level with the sidewalk. A rent of $400 a month on the main street may look high compared with $40 a month three or four doors from the main street, but the rent is only ten times as great and there may be twenty-five shoppers on the main street for every one that passes up the side street. A Boston dealer made money enough in a little three angled room scarcely big enough for three customers at once but located on a famous corner, to build one of the largest and finest business blocks for which that city is noted. His rent was $1500 a month and his three-cornered store of one-hundred years' standing wasn't worth, apart from the lot, as much as a good suit of clothes. Larger sales, even though profits are smaller, afford opportunities for closer buying and nowadays when the fixed prices of manufacturers and jobbers are blown to the four winds, the buyer gets the best bar-

gain who can buy the largest quantity upon the shortest time. In fact, in these days of active competition when profits seem reduced in so many directions, the buying of the goods is equally important with the selling. The merchant who cannot buy to advantage might as well step aside and let the large dealer have the trade. The old maxim, "goods well bought are half sold" is truer to-day than ever before. In opening up a new business wait, if necessary, until an excellent location can be secured. This is one-half the secret of many an abundant success.

Method and System.

The young man who lacks *order* will nineteen times out of twenty fail of success. The merchant ought to cultivate systematic habits in all his affairs. If it is known among his clerks and employees that the same hour every morning will find him in his store or counting-room, this very fact will infuse punctuality throughout the house. The work should be systematically distributed among the clerks and each article of goods should have its special place, convenient of access and ready to handle. If there are crowds of customers there is not likely to be much dust on the goods but the clerk whose time is not full and who allows the dust to accumulate should be *bounced*. Every moment of his time should be used either in selling or in re-arranging goods, in scattering dust, or in soliciting trade. The young man who has an opportunity to work and who doesn't work doesn't deserve success. The *change* system should be so complete that customers will not be kept waiting. The clerks should be so thoroughly familiar with their stock that all reasonable questions can be answered promptly. In our largest and most prosperous business houses the work is divided and sub-divided into departments; a man is placed in charge of each special line of goods; he is under instructions to see that his stock is in every sense up-to date; he must keep to the front such articles as are likely to attract custom; remnants and *dead stock* instead of being put out of reach on a top shelf are carefully sorted, specially *bargain* marked, and so displayed as to be easily worked off. Nearly every mercantile failure finds about half the stock so old and shop-worn and dusty and dead as to be almost unsalable even under the hammer. Exercise *system* in buying. The successful merchant lets novelties alone and deals in goods which he knows he can sell. By not scattering his resources, he can buy greater quantities and at better figures. And above all things have order and system in the counting-room, in the keeping of books,

in the filing of papers, in the payment of bills, in the collection of accounts—in everything in any way related to the finances of the business.

The Talent of Success.

Longfellow once said that the talent of success is nothing more than doing what you can do well, without a thought of fame. Man was made for action and life is simply a field for brain and heart exercise. We owe a large part of our happiness to our mistakes, and yet it is true that happiness is never found in failure. Don't mistake aspiration for inspiration. Ambition without genius is sure to end in failure. A man may be a very successful lawyer, though he might fail if appointed chief justice; a man may be a very successful teacher but entirely unfit for the position of college president. It is a mistake to say that a man can be whatever he *wills* to be. The strongest and most constant will in the world is not an entire substitute for brains. All callings are alike honorable if pursued with an honorable spirit. A blacksmith may be a man of polished manners while a bank president may be a clown. It isn't enough to say that *if* a young man will only do thus and so he may reach success. The power of patient labor is the very essence of genius. What a man does is the real test of what he is, and to intimate that a certain person would accomplish great things if he had more activity of mind is to say that he would be stronger if he had more strength. All experience shows that it is the nature of genius to labor patiently, and hence it is easy to leap to the conclusion that genius is but patient labor. Don't run away with the idea that *will* can do the work of *intellect*, or that *effort* can take the place of *genius*, or that mere intensity of desire can give intensity of power. Great deeds are done by great men and often without effort. Neither do great occasions make great men. They bring great men to the front, before the public eye, use them, but do not make them. It is more often that great men make great occasions. No man is ever a great man who wants to be one. Shakespeare wrote for money, not fame. Homer sang to kindle patriotism in the hearts of his countrymen. Grant, apart from his work, was the most ordinary man in a thousand. However, no man knows what are his powers, whether he is capable of great things or small, until he has tested himself by actual trial. The more limited your powers the greater need of effort. The Spartan youth who complained to his mother that his sword was too short, was told to add a step to it. To a large extent, as William

Penn declares, "industry supplies the want of parts; patience and diligence, like faith, remove mountains." "There lives not a man on earth, out of a lunatic asylum," says Sir Edward Bulwer Lytton, and the words should ring in every young man's ears, "who has not in him the power to do good. What can writers, haranguers, or speculators do more than that? Have you ever entered a cottage, ever traveled in a coach, ever talked with a peasant in the field, or loitered with a mechanic at the loom, and not found that each of those men had a talent you had not, knew some things you knew not? The most useless creature that ever yawned at a club, or counted the vermin on his rags, under the suns of Calabria, has no excuse for want of intellect. What men want is, not talent, it is purpose; in other words, not the power to achieve, but the will to labor." Very ordinary ability properly made use of must bring a certain measure of success. There are few really great men while there are thousands of really great things to be done. Men are pushed forward by events over which they have no control. They never know their own power until it is measured up against enormous obstacles. Success depends more upon ability adapted to work than upon any superior intellectual power. The man whose ability best fits him for a profession might be a failure in business no matter how great his genius. A moderate talent well applied will achieve more useful results, and impose more on mankind, than minds of the highest order, whose temper is too fine for mechanical or industrial pursuits. Besides, there is a discretion more valuable than the most extensive knowledge. Men must have tact and good judgment and clear and quick perception. Men of genuine ability are rarely idle. To allow them to remain so is to allow capital which might pay large profits to remain uninvested. Hold your ground and push hard. Watch opportunities. Be rigidly honest. The young men who spend their evenings smoking cigarettes and telling shady stories, with the street corner for their location and packing boxes for chairs, need not spend any time learning "how to write a check" for the chances are a thousand to one that they will never have a bank account.

Favoring Circumstances in Life.

We meet people daily who are so profoundly dull that they seem to be experts in this particular qualification. Dr. Johnson described one of these persons by saying, "Why, sir, he is dull, naturally dull; but it must have taken him a great deal of pains to become what we now see him. Such an excess of stupidity is not in nature." There

is no such thing as luck in the ordinary sense, but as Shakespeare has it, "There is a divinity that shapes our ends, rough-hew them how we will." There is no doubt about the matter that many able men were "born to blush unseen, and waste their sweetness on the desert air." There are environments and circumstances which make for success and if we fail to get into the tide, we are sure of failure. True, some men seem to make money at every turn and without apparent effort while others with the most careful planning and closest economy, fail to make money. The sum of the matter is that success depends upon opportunity as well as upon ability. Men pass by the footpaths which lead to larger roads leading to great commercial routes simply because the paths run up hill, and seem rough, and their direction is unknown. The tree that grows soft and spongy in a swamp grows hard and noble on the hillside. "All things work together for good," but not always for gain, "to those who love God." While circumstances may make or mar a man, it is more often true that man is privileged to make his own circumstances. The race is not always to the swift or the battle to the strong. Opportunity is coy. The careless, the slow, the unobservant, the lazy, fail to see it, or clutch at it when it is gone. It isn't enough, however, to strike the iron when it is hot, we must strike it till we make it hot. It is an interesting fact that Wellington, who never lost a battle, never spoke of luck, though no man guarded more carefully against all possible accidents, or was prompter to turn to account the ill-fortune of an adversary. Napoleon, on the other hand believed in his star. What some would call bad luck are the very discouraging incidents of his life which the successful man uses for his own advancement. The rungs of the ladder of success are made of failures which the climber puts his foot on to reach higher.

Use Every Minute of Time.

Gladstone is reported to have said "that thrift of time will repay you in after-life with a usury of profits beyond your most sanguine dreams, and that the waste of it will make you dwindle, alike in intellectual and in moral stature, beyond your darkest reckonings." The young business man's most important lesson is along the line of time economy. Habits of indolence, listlessness, and procrastination, once firmly fixed, cannot be suddenly thrown off, and the man who has "wasted the precious hours of life's seed-time finds he cannot reap a harvest in life's autumn." Go hunt out the men in any community who have done the most for their own and the general good, and you

will find that they are almost uniformly the overworked class, the almost-driven-to-death men who seem piled all over with work. It is these men who are most active in public affairs, in church affairs, and in all matters concerning the public good. Men of this class, however crowded with business, are always found capable of doing a little more, and you can rely upon them in their busiest season with ten times more assurance than upon the idle man. Give a busy man five minutes to write a letter and he will dash it off at once; give an idle man a day, and he will postpone it till to-morrow or next week. There is a momentum in the active man which of itself almost carries him to the mark, just as a very light stroke will keep a hoop agoing, when a smart one was required to set it in motion. The men who do the greatest things in this world have the genius for hard work, the most desirable kind of genius. Most persons, to achieve anything, need to be always busy; and for them it is better never to have any idle moments, but always to have some work on the anvil to which they can turn their hand.

Use Money Carefully.

Don't waste your breath talking about money being a great evil. Men will make any kind of sacrifice for money. Whatever may be said about the dangers of riches, ten times as much may be said about the dangers of poverty. The poor man is hourly beset by temptations which the rich man knows nothing of. Poverty is a condition which no man should accept except it is forced upon him. It is the want of money which makes men workers. It is this scantiness of means, this continual deficiency, this constant hitch, this perpetual struggle to keep the head above water and the wolf from the door, that keeps society from falling to pieces. Money is desired not merely for the comforts it affords but for the influence which it brings. It is said that in England no man can afford to have an opinion who has not an income of two thousand a year. An anecdote was told some years ago of two men who were conversing about John Jacob Astor's wealth. The one asked the other if he would be willing to take care of the fifteen millions merely for his board and clothing? "No!" was the indignant answer, "do you take me for a fool?" "Well," said the other, "that's all Astor gets for the job." Let every one who would get on in the world estimate fairly the value of money. Let him use it that he may personally be a blessing to others. To work hard, to improve every moment, to economize, to avoid debt—these are the only sure steps to

a comfortable old age. What clerk that spends twenty cents a day for a couple of cigars, dreams that by this expenditure, with the accumulated interest, he will in fifty years have smoked away $20,000? Yet a man who by a life of industry had laid by such a sum would, in most country towns, be deemed rich. No amount of means or earnings can justify waste by a nation or by an individual. The Great Teacher, when displaying His infinite power to the multitude, taught the needful lesson of economy by asking that the fragments of loaves and fishes be gathered that nothing be lost.

A Cheerful Daily Life.

A man's daily life is the best test of his moral and social state. Take two men, for instance, both working at the same trade and earning the same money; yet how different they may be as respects their actual condition! The one looks a free man; the other a slave. The one lives in a snug cottage; the other in a mud hovel. The one has always a decent coat to his back; the other is in rags. The children of the one are clean, well-dressed, and at school; the children of the other are dirty, filthy, and often in the gutter. The one possesses the ordinary comforts of life, as well as many of its pleasures and conveniences—perhaps a well-chosen library; the other has few of the comforts of life, certainly no pleasures, enjoyments, nor books. And yet these two men earn the same wages. What is the cause of the difference between them? It is in this: The one man is intelligent and prudent; the other is the reverse. The one denies himself for the benefit of his wife, his family, and his home; the other denies himself nothing, but lives under the tyranny of evil habits. The one is a sober man, and takes pleasure in making his home attractive and his family comfortable; the other cares nothing for his home and family, but spends the greater part of his earnings in the gin-shop or the public-house. The one man looks up; the other looks down. The standard of enjoyment of the one is high, and of the other low. The one man likes books, which instruct and elevate his mind; the other likes drink, which tends to lower and brutalize him. The one saves his money; the other wastes it. How is it that of two men working in the same field or in the same shop, one is merry as a lark; always cheerful, well-clad, and as clean as his work will allow him to be; comes out on Sunday mornings in his best suit to go to church with his family; is never without a penny in his purse, and has something besides in the savings bank; is a reader of books and a subscriber to a newspaper, besides taking in

some literary journal for family reading; while the other man, with equal or even superior weekly wages, comes to work in the mornings sour and sad; is always full of grumbling; is badly clad and badly shod; is never seen out of his house on Sundays till about midday, when he appears in his shirt-sleeves, his face unwashed, his hair unkempt, his eyes bleared and bloodshot; his children left to run about the gutters, with no one, apparently, to care for them; is always at his last coin, except on Saturday night, and then he has a long score of borrowings to repay; belongs to no club, has nothing saved, but lives literally from hand to mouth; reads none, thinks none, but only toils, eats, drinks, and sleeps—why is it that there is so remarkable a difference between these two men? Simply for this reason that the one has the intelligence and the art to extract joy and happiness from life; to be happy himself, and to make those about him happy; whereas the other has not cultivated his intelligence, and knows nothing whatever of the art of either making himself or his family happy. With the one, life is a scene of loving, helping, and sympathizing; of carefulness, forethought, and calculation; of reflection, action and duty: with the other, it is only a rough scramble for meat and drink; duty is not thought of, reflection is banished, prudent forethought is never for a moment entertained.

Character.

Character tells in all conditions of life. It is the crown and glory of life. It is man's noblest possession, constituting a rank in itself, and an estate in the general good-will; dignifying every station, and exalting every position in society. It exercises a greater power than wealth, and secures all the honor without the jealousies of fame. It carries with it an influence which always tells; for it is the result of proved honor, rectitude, and consistency,—qualities which, perhaps more than any other, command the general confidence and respect of mankind.

Character is human nature in its best form. It is moral order embodied in the individual. Men of character are not only the conscience of society, but in every well-governed State they are its best motive power; for it is moral qualities in the main which rule the world. Even in war, Napoleon said the moral is to the physical as ten to one. The strength, the industry, and the civilization of nations,—all depend upon individual character; and the very foundations of civil security rest upon it. Laws and institutions are but its outgrowth. In the just balance of nature, individuals, nations, and races, will obtain

just so much as they deserve, and no more. And as effect finds its cause, so surely does quality of character amongst a people produce its befitting results. Though a man have comparatively little culture, slender abilities, and but small wealth, yet, if his character be of sterling worth, he will always command an influence, whether it be in the workshop, the counting-house, the mart, or the senate. Energy of character has always a power to evoke energy in others. It acts through sympathy, one of the most influential of human agencies. The zealous, energetic man unconsciously carries others along with him. His example is contagious, and compels imitation. He exercises a sort of electric power, which sends a thrill through every fibre, flows into the nature of those about him, and makes them give out sparks of fire. The same qualities which determine the character of individuals also determine the character of nations. Unless they are high-minded, truthful, honest, virtuous, and courageous, they will be held in light esteem by other nations, and be without weight in the world. Character is one of the greatest motive powers in the world. In its noblest embodiments, it exemplifies human nature in its highest forms, for it exhibits man at his best. Although genius always commands admiration, character most secures respect. The former is more the product of brain-power, the latter of heart-power; and in the long run it is the heart that rules in life. Men of genius stand to society in the relation of its intellect, as men of character of its conscience; and while the former are admired, the latter are followed. A life exclusively occupied in affairs of business insensibly tends to narrow and harden the character. It is mainly occupied with self—watching for advantages and guarding against sharp practice on the part of others. Thus the character unconsciously tends to grow suspicious and ungenerous. Character is property. It is the noblest of possessions. It is an estate in the general good-will and respect of men; and they who invest in it —though they may not become rich in this world's goods—will find their reward in esteem and reputation fairly and honorably won. And it is right that in life good qualities should tell—that industry, virtue, and goodness should rank the highest—and that the really best men should be foremost. The best sort of character can not be formed without effort. There needs the exercise of constant self-watchfulness, self-discipline, and self-control. There may be much faltering, stumbling, and temporary defeat; difficulties and temptations manifold to be battled with and overcome; but if the spirit be strong and the heart be upright, no one need despair of ultimate success. The very effort

to advance—to arrive at a higher standard of character than we have reached—is inspiring and invigorating; and even though we may fall short of it, we can not fail to be improved by every honest effort made in an upward direction. Without principles, a man is like a ship without rudder or compass, left to drift hither and thither with every wind that blows. He is as one without law, or rule, or order, or government. Integrity of word and deed ought to be the very corner-stone of all business transactions. To the tradesman, the merchant, the manufacturer, it should be what honor is to the soldier, and charity to the Christian. In the humblest calling there will always be found scope for the exercise of this uprightness of character. Hugh Miller speaks of the mason with whom he served his apprenticeship, as one who "*put his conscience into every stone he laid.*" Narrow-mindedness in living and in dealing is generally short-sighted, and leads to failure. The penny soul, it is said, never came to twopence. Generosity and liberality, like honesty, prove the best policy after all.

A Strong Will.

Egotism, skepticism, and selfishness are always miserable companions in life, and they are especially unnatural in youth. The egotist is next door to a fanatic. Constantly occupied with self, he has no thought to spare for others. He refers to himself in all things, thinks of himself, and studies himself, until his own little self becomes his own little god. A man may be feeble in organization, but, blessed with a happy temperament, his soul may be great, active, noble, and sovereign. Professor Tyndall has given us a fine picture of the character of Faraday, and of his self-denying labors in the cause of science,—exhibiting him as a man of strong, original, and even fiery nature, and yet of extreme tenderness and sensibility. "Underneath his sweetness and gentleness," he says, "was the heat of a volcano. He was a man of excitable and fiery nature; but, through high self-discipline, he had converted the fire into a central glow and motive-power of life, instead of permitting it to waste itself in useless passion." A strong temper is not necessarily a bad temper. But the stronger the temper, the greater is the need of self-discipline and self-control. Doctor Johnson says men grow better as they grow older, and improve with experience; but this depends upon the width and depth and generousness of their nature. It is not men's faults that ruin them so much as the manner in which they conduct themselves after the faults have been committed. The wise will profit by the suffering they cause, and eschew them for

the future; but there are those on whom experience exerts no ripening influence, and who only grow narrower and bitterer, and more vicious with time. What is called strong temper in a young man, often indicates a large amount of unripe energy, which will expend itself in useful work if the road be fairly opened to it. There are, of course, times and occasions when the expression of indignation is not only justifiable but necessary. We are bound to be indignant at falsehood, selfishness and cruelty. A man of true feeling fires up naturally at baseness or meanness of any sort, even in cases where he may be under no obligation to speak out. Strong temper may only mean a strong and excitable will. Uncontrolled, it displays itself in fitful outbreaks of passion; but controlled and held in subjection—like steam pent up within the organized mechanism of a steam-engine, the use of which is regulated and controlled by slide-valves and governors and levers—it may become a source of energetic power and usefulness. Hence some of the greatest characters in history have been of strong temper, but of equally strong determination to hold their motive-power under strict regulation and control.

Letters which bring Business, and How to write them.

Kinds of Letters.

The primary idea of a letter is conversation at a distance. If this be kept in mind, one can scarcely fail to write appropriately, if one can converse properly; for a letter may be familiar or reserved, jocular or dignified, according to the relations between the writer and the person addressed. Letters of friendship should be simple and natural. It is the little things, the incidents of every-day life, the home-chat which makes a friendship letter interesting. Letters of courtesy include invitations, acceptances, acknowledgements, letters of congratulation, of condolence, of introduction, and of recommendation. Letters of business include all correspondence relating to business matters. Public letters embrace communications to newspapers regarding public affairs. Frequently a writer publishes a letter addressed to some prominent person, criticising his opinions or actions, or putting to him a number of formal questions with the purpose of receiving a published reply. This is usually called an open letter.

Arrangement of a Letter.

You have a right to make your own style and as a rule the more characteristic it is of yourself the better. But custom has established certain forms and usages for business and social correspondence which it is generally convenient to follow. The parts of a letter are the heading, the address, the salutation, the body, the complimentary close, and the signature. This is a good form for the beginning of a letter. It is

neat and compact and has about it all the information and formality necessary. Quite often we see letters the salutation of which is carried so far over to the right that scarcely any room is left for the first line of the body of the letter. This is a very awkward form for both manuscript and typewritten letters and should not be encouraged. Bring the "My dear Sir" over to the left so that it will be flush with the "Mr." and one space from the left end of the second line. This is the most approved form, and it is certainly the neatest. See that your address at the top is full and complete. Write the street, or the P. O. Box, or whatever supplemental address is necessary, just above the name of your post office. If your business letter is to a married woman, say "My dear Madam" instead of "My dear Sir." If you are well acquainted with the man, drop the name and address, and write simply, "Dear Mr. Adair," or if a woman, write "Dear Mrs. Brown." If he

100 St. Vincent St.

Toronto, Ont., June 30. 95

Mr. Chas. H. Wheeler

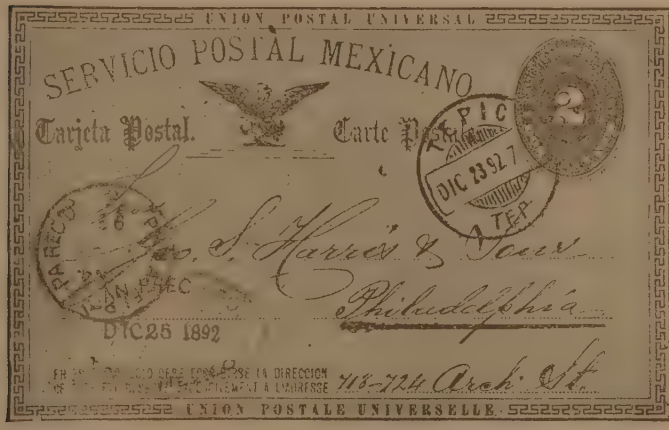
Branchport, N.Y.

My dear Sir:

I am not in a position to-day to give you the information called for, but &c.

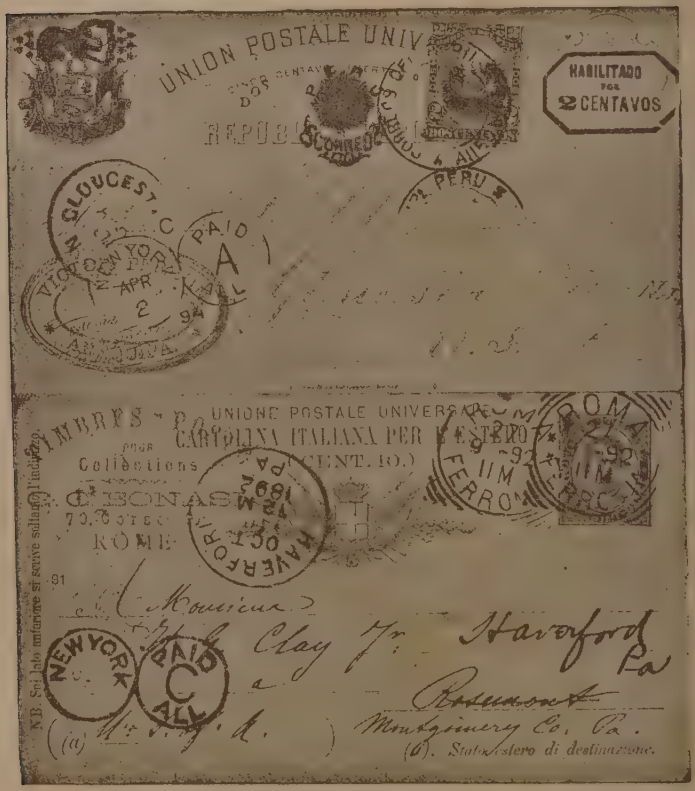
is younger than you, either in years or experience, or even if he is on equality and is a warm friend, you might begin "My dear Mr. Adair." Note that when written this way "dear" is not written with a capital. If you are addressing a business letter to a young lady whom you do not know, simply write "Miss Kate Sanderson," and begin your letter without any further introduction. If you are acquainted, either formally or if your names are familiar one to the other, you may write "Dear Miss Sanderson." Of course when written in this way there is no other part to the salutation as in the business letter addressed to "John Adair," when his address is given. Friendly letters to men or boys may begin "My dear Charley" or "My dear Brown." The old forms "Kind friend" or "Dear friend" are a good deal out of date. If you are addressing a business letter to a firm, write "Gentlemen" instead of "My dear Sir." Never use the vulgar contraction "Gents." Neatness and correctness are essential in all correspondence. There is

no excuse for a carelessly written letter. There are towns and cities in the different states which have the same name. In writing from any such, even though it be a large and well-known place, be careful to add the name of the state. It is better to put your street and number upon every letter. Your correspondent does not want to spend an hour looking for an old letter containing your address. Be careful not to crowd your letter. Leave a good inch at the top of the sheet perfectly blank Titles should not be omitted, but they should be used sparingly. "Mr." is good enough for anybody from the President down. Never put on a title at each end of a name or more than one at either end. The salutation of letters addressed to public officers should be quite



formal, if the letters relate to public affairs. In such letters the address is usually put at the close. Keep the margins of your letter even. Do not make many paragraphs. The chopping up of a letter into paragraphs seems to be about all that the average amateur typewriter knows about arrangement. Make a new paragraph only when there is an entire change of subject. If you have been writing about the death of your great grandmother and have finished and wish to say something about the weather, begin with a new paragraph. When a new paragraph is necessary it should begin directly on a line with the first word of the body of the letter, that is, one space in. Learn to write *straight* on unruled paper. The complimentary close follows the body of the letter, and immediately precedes the signature. The closing words

should not be more familiar than the salutation, and, like the words of the salutation, they depend upon the relation between the two persons. "*Respectfully yours*," "*Very truly yours*," "*Yours cordially*," etc., are the usual closing words of formal correspondence. They don't



mean anything, not even as much as "Good Day" to the passer-by. A man will write a letter abusing another shamefully and then sign himself "*Very truly yours.*" Letters of friendship, of course, admit of less formal terms. The first word only of the complimentary close should begin with a capital.

The Signature.

Write your signature plainly. Your friends may be very familiar with your dashing ink lines, but the man who sees your name for the

which will be less than ten days after you reach Philadelphia

Yours very cordially

Seymour Eaton

first time may have considerable difficulty in transforming it correctly into readable script.

Three Important Points.

The abbreviated form of *instant* is *inst.* In correspondence the

word means "present month." The abbreviated form of *ultimo* is *ulto.* or *ult.* In correspondence this Latin word means "the month last past." The abbreviated form of *proximo* is *prox.* In correspondence this Latin word means "next month." *On the 4th prox.* would mean on the fourth of next month. *On the 7th ult.* means on the seventh of last month.

The Envelope Address.

Thirty thousand misdirected letters reach the dead letter office at Washington daily. The public need to be educated along this line. In addressing an envelope, write first the name, then the post office,

UNITED STATES COAST AND GEODETIC SURVEY.

WASHINGTON, D.C., May 8th, 1896

Mr. Edwyn Leitfreed,
Drexel Institute of Art, Science and Industry,
Philadelphia, Pa.

Sir:

In compliance, so far as practicable, with your request of the 6th inst. I sent you by mail yesterday, free of charge 26 charts of canceled editions, unsuitable for navigation.

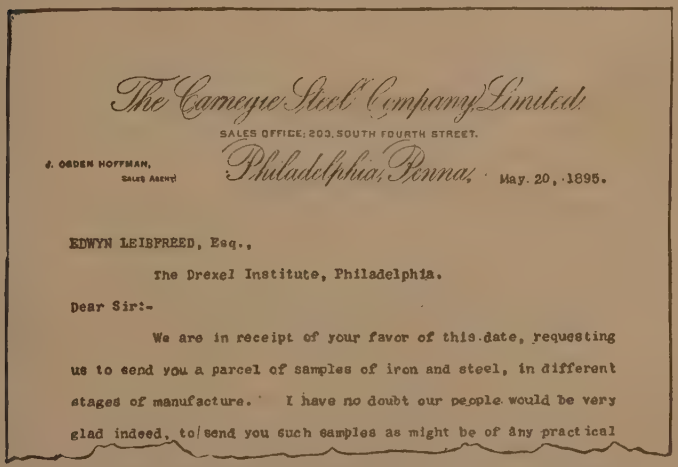
Should you find that you need other charts, on inspection of the catalogue also mailed to you yesterday, I shall be pleased to furnish you with twenty more, free of charge, which please select and mention by catalogue numbers only. If you need still more, they can be purchased through our agents in Philadelphia, Messrs. Riggs & Bro., #221 Walnut Street,

For any interior maps not noted in our catalogue I would refer you to the U. S. Geological Survey and for those of the Mississippi River and Great Lakes to the Chief of Engineers, U. S. A., both in this City.

Respectfully yours,
Andrew Braid
Acting Superintendent.

then the state. If additional matter, such as street, or box, or county, is necessary, put it at the lower left-hand corner. Even in the case of large cities, it is necessary to write the name of the state, for there are in the United States, five New Yorks, nine Philadelphias, and twelve Bostons. Be particularly careful in writing the abbreviations of states.

Thus N. Y. may easily be taken for N. J.; Pa. for Va.; Cal. for Col.; Md. for Ind.; Me. for Mo. Mail intended for people who will be in a place only a day or two should have "transient" added to the address to distinguish from permanent residents. Write in the upper left-hand corner and enclose in brackets. Always put the stamp in the upper right-hand corner. Letters to be registered must have the name and address of the sender on the envelope. Do not write the name of the county where the postal employees always look for the name of the post office. Railway mail clerks have to distribute many pieces of mail while the train is running from one station to another, and must decide to what place to send a letter in a fraction of a second. When



The Carnegie Steel Company Limited

SALES OFFICE: 203 SOUTH FOURTH STREET.

J. OGDEN HOFFMAN, Sales Agent

Philadelphia, Penna., May. 20, 1895.

EDWYN LEIBFREED, Esq.,

The Drexel Institute, Philadelphia.

Dear Sir:-

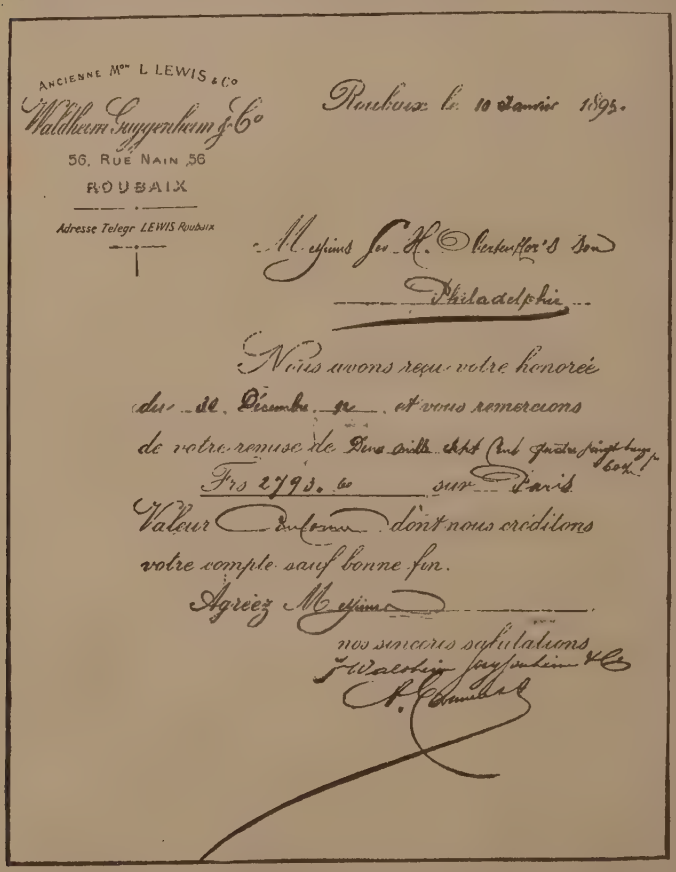
We are in receipt of your favor of this date, requesting us to send you a parcel of samples of iron and steel, in different stages of manufacture. I have no doubt our people would be very glad indeed, to send you such samples as might be of any practical

the county and post office are close together, the clerk is almost as apt to take the name of the county for the post office as the right name. The penmanship should be distinct and legible, and the address neat and elegant, without ornamentation. Non-delivered letters are returned to the writers who have their names and post offices printed on the upper left hand corner. A little more care in the matter of addressing envelopes would save much labor, and the government much expense.

What Constitutes a Good Letter?

A good social letter is one which has an abundance of goodness whether the news be sad or glad. The spelling or grammar do not

make the letter any more than the clothes make the man. A letter from a rich uncle stating that he had left you his fortune could not very well be considered a bad letter even though every word were spelled wrong and the penmanship almost illegible. A good business


ANCIENNE Mon L LEWIS & Co

Waldheim Swygenhaum & Co

56, RUE NAIN, 56

ROUBAIX

Adresse Telegr. LEWIS Roubaix

Roubaix le 10 Janvier 1895.

Messieurs Jos. H. Oberkoffer's Son

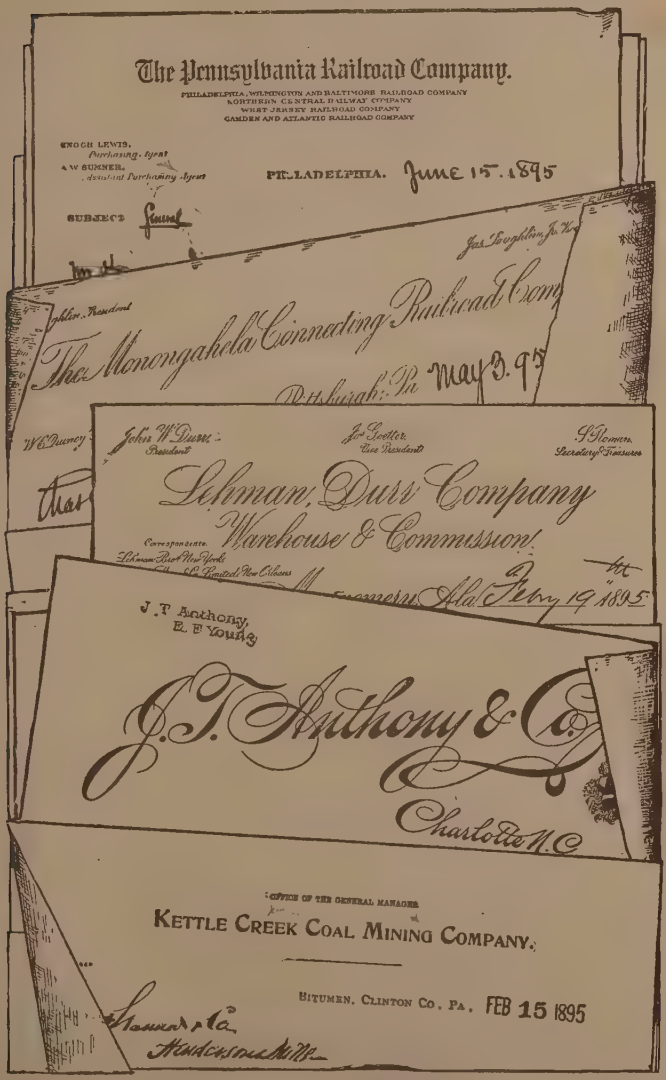
Philadelphie

Nous avons reçu votre honorée du 16 Décembre 94 et vous remercions de votre remise de Deux mille huit cent quatre vingt trois 60/100 Frs 2783.60 sur Paris Valeur en forme dont nous créditons votre compte sauf bonne fin.

Agréez Messieurs nos sincères salutations

Waldheim Swygenhaum & Co

letter is one which *does business*. No matter how neatly or correctly written, if it fails in its object it is a poor letter. The traveler who fails to sell goods is a poor traveler no matter how business-like his address or how nobby his clothes.


The Pennsylvania Railroad Company.
PHILADELPHIA, WILMINGTON AND BALTIMORE RAILROAD COMPANY
NORTHERN CENTRAL RAILWAY COMPANY
WEST JERSEY RAILROAD COMPANY
CAMDEN AND ATLANTIC RAILROAD COMPANY
ENOCH LEWIS,
Purchasing Agent
A.W. SUMNER,
Assistant Purchasing Agent
PHILADELPHIA. June 15. 1895
SUBJECT
The Monongahela Connecting Railroad Com
Pittsburgh, Pa. May 3. 95
John W. Duss
President
Jno. Foster
Vice President
S. Stoner
Secretary & Treasurer
Lehman, Duss Company
Warehouse & Commission
Correspondents
Lehman, Bro's New York
Ala. Feby 19 1895
J. T. Anthony,
E. F. Young
J. T. Anthony & Co.
Charlotte N.C.
OFFICE OF THE GENERAL MANAGER
KETTLE CREEK COAL MINING COMPANY.
BITUMEN, CLINTON CO., PA. FEB 15 1895

The Illustrations.

A few illustrations are given of good letter forms. The one on page 238 is a good sample of an official letter such as are sent from the government departments at Washington. On page 239 is a sample of a business letter showing a very neat letter-head and a pleasing arrangement of type-written matter. On page 240 is given a foreign acknowledgment of the payment of a bill, and the illustrations on pages 241 and 250 show some very neat and attractive business headings. All the illustrations are very much reduced in size.

Choice of Language.

The ready use of good language is largely the result of practice in writing and of an abundance of good reading. Prof. Genung in one of his valuable books on the study of English gives a few rules for the choice of words which we take the liberty to quote: 1. In the choice of words, let the paramount consideration be exactness. That is, seek to say precisely what the thought requires, neither more nor less. This demands, of course, close scrutiny of meanings, and independence of current fashions in words. 2. Seek to have at command more than one expression for the same thing. Not that several forms are in any case to be employed; but it often happens that if the writer has not thought broadly and deeply enough to have more than one expression for his idea, the one that he has will be meagre. 3. Cultivate the habit of observing the derivation and history of words. A word whose etymology is known defines itself; the writer feels its force intuitively, and need not depend on a dictionary. 4. Enlarge your vocabulary by diligent study of usage in the best writers. The true meaning of words is expressed only when they are interwoven with other words. No fineness of usage can be acquired from the dictionary alone. 5. Do not use technical terms where they are not likely to be understood. 6. Beware of *fine writing*. By fine writing is meant the use of pretentious terms for trivial ideas.

EXAMINATION EXERCISES.

1. Write an order on a merchant for $25 worth of goods to be given to a friend whom you name and to be charged to your account.

2. Write a due bill in favor of a carpenter who has put in some shelving valued at $20, payable in goods from your store.

3. Write for the Old Corner Bookstore, Boston, a letter to Dr. Adam Anderson, Troy College, Troy, N. Y., advising of the shipment by express of 200 copies of Jenkin's Philosophy. State that owing to unusual demands, the last edition was exhausted very quickly, and the order was delayed for the second edition, which was received only this morning from the bindery.

4. Write an application for a position which you are satisfied you are able to fill.

5. In an invoice which you have received from a wholesale house, you find, after you have honored a draft for the face of the invoice, an error in addition which makes the charge $15 too much. Write a letter to the wholesale house calling their attention to the matter.

6. Write a letter to an out-of-town customer who is very much behind with his payments, asking the reason, and urging an early settlement.

7. Write a letter to a delinquent customer, enclosing a statement of his account ($76.84) and calling his attention to the same.

8. The person to whom you have written has given your letter no attention. Write him a second letter more pointed than the first.

9. Put yourself in the debtor's place, and write a suitable reply to the foregoing, enclosing your check for part of the amount due, and asking time on the balance.

10. Write an order on Warden & Gerrow for $10 worth of groceries to be given to "the bearer, Thomas L. Wilkinson," and to be charged to your account.

11. Write a due bill in favor of Donald Robinson for $20, payable in goods from your store.

12. Write a due bill in favor of Miss Harriet Beecher for $25, payable on demand in cash.

13. Robert Abercrombie borrowed of Silas Wiggins $75, payable on demand with interest at 8 per cent. Date to-day. Write the receipt. How does a receipt like this differ from a note?

14. Write a receipt for money paid you by one person in part payment of an account which is due you by another. Date to-day. Sign your own name.

15. You are a wholesale commission merchant in the city. Write an advisory letter to a former friend, who proposes to sell his farm and invest in a flour and feed business.

16. You are a teacher in a public school in Cleveland. Write a letter to the Secretary of the School Board, requesting leave of absence for two months on account of ill health.

17. An old school friend of yours has attained high honors at the University. Write him a letter of congratulation.

18. You are ill and unable to go to business this morning. Write a note to your employer, giving the cause of your absence, and one to your physician requesting his attendance.

19. Write a letter introducing a young friend of yours to a minister in a distant city.

20. The traveler of a wholesale firm is on the road. Write him a letter from the firm relative to his movements from this date.

21. You have a back room in your office, which you will rent to a gentleman requiring desk accommodation. Write an advertisement.

22. You desire a position as teacher in a public school. Write a letter to the School Board, stating the position for which you apply, and stating your qualifications and experience.

23. You are the senior partner of a firm. Write a testimonial for an accountant who is leaving the house, stating your personal appreciation of his character and ability.

24. In an invoice just received from a wholesale dealer you find an error in addition. Write a letter to the wholesale dealer, calling his attention to the matter.

25. As corresponding clerk for the wholesale dealer, write a suitable reply to the foregoing letter.

26. One of your salesmen is about to move to a distant city. Write him a letter of recommendation.

27. You are corresponding clerk for a wholesale firm, who have just received from a country merchant a letter ordering goods on credit. Write a reply, declining to open an account and giving reasons. Make it very polite.

28. Write a letter to a wholesale house, acknowledging the receipt of part of the goods which you ordered, specifying some which have not arrived and some which are not equal to the samples shown you by their traveler.

29. Write a letter to some prominent person with whom you are acquainted, or have been employed, asking for a letter of recommendation. Write a letter of recommendation for a young man seeking employment.

30. You owe your hired man, Thomas Kingsley, eighteen dollars, wages. Write him an order on G. C. Watson & Co., grocers, for the amount, payable in groceries from their store.

31. Your spring stock of dry goods has just arrived. You have many season novelties and a great variety of miscellaneous articles. Write five short reading notices, and one large advertisement intended for your town newspaper, announcing the character and prices of your merchandise.

32. You have received a monthly statement of your account from a general merchant. Write him a letter, enclosing ten dollars to apply on account and requesting time on the balance. Write a suitable reply to the letter you have just written.

33. There have been some changes in the name and working of the firm of which you are a member. Prepare a circular letter to be sent to your customers, informing them of the changes and soliciting a continuance of their patronage.

34. Chas. M. Brown & Co., 42 Tremont Row, Boston, advertised for a young man to assist in office work, and out of fifty-five replies received, they consider Marshall Maxwell's the one most likely to be approved. Maxwell has been in the employ of Samuel Smith & Co., Haymarket Square, and of the Emerson Manufacturing Company, 43 Devonshire St., and he refers Brown & Co. to each of his previous employers. Brown & Co. write to both asking them to tell them in confidence all they can about Maxwell. Write (1) the advertisement, (2) Maxwell's application, (3) one of the two letters of inquiry, (4) a favorable reply to the letter of inquiry, (5) an unfavorable reply to the letter of inquiry.

35. Peter Carter Bros. Company, of Lincoln, Neb., owe the Berlin Cotton Mills, 53 S. Jersey St., Trenton, N. J., an account of $396.45. The latter concern notifies Carter Bros. Company that they

will draw on them at sight in ten days, and that they shall expect the draft to be honored. Carter Bros. are sure they cannot meet the draft, notwithstanding the fact that the account is long overdue. Their own collections have been slow owing to the business depression in the West. Act for Paul Carter and write a letter to this creditor, stating the situation fully and frankly, enclosing a check for as large an amount as possible, and asking for an extension of time on the balance. Let your letter be such as will retain the confidence of your creditor.

36. Answer the advertisement below, describing the sort of room you wish, stating the price you can pay, and giving the name of some person as reference:

> BOARD.—A few boarders can be accommodated with a small family in desirable part of the city. References exchanged. Address: Mrs. Emma R. Walker, 469 Grand River Ave.

37. John Henry Wood, Box 735, Providence, R. I., answers the following advertisement. Mr. Donaldson replies, giving a full description of the farm, stating price, reasons for selling, and other facts which the purchaser may wish to know. Write the letter for Mr. Donaldson.

> FOR SALE.—A farm of seventy-five acres, fifty acres under cultivation. Near market. Price low. Easy terms. For full particulars address David Donaldson, Winthrop, Mass.

38. Write a note to D. T. Ames Company, 202 Broadway, New York City, calling their attention to an error in a small order of books which you received from them to-day.

39. Prepare a deposit slip for a bank, the deposit to consist of coin, bank notes, express orders, local and out-of-town checks.

40. An associate of yours has done you a great injury in mistaking facts regarding your character. Write him, asking an explanation, and demanding a full reparation of the wrong.

41. Baker & Jones, 246 William St., New York, owe you $125. Write them a brief note, stating that you will draw on them for the amount, on the 10th of the following month.

42. The draft drawn on Baker & Jones has been returned with the word "refused" written on the back. Write them, expressing your surprise and asking an explanation.

43. Put yourself in the position of Baker & Jones' accountant, and reply to the letter you have just written.

44. You are one of twenty-five citizens desiring certain improvements on one of the streets of your town. Draw up a letter to the mayor and aldermen, placing the matter before them and requesting their attention thereto.

45. You are a teacher and desire a situation. Write to a school inspector or superintendent. Ask information about certain vacancies, and state your qualifications and the salary you will accept.

46. Prepare a circular to be sent out to all customers whose accounts are overdue, requesting them to pay before a certain day, and notifying them of a proposed change in the management of your business.

47. Charles Henry Bowlipp, of Fernwood, Pa., owes F. A. Black & Son, Philadelphia, a bill of $137.40 for papering and decorating. The bill has been rendered several times and the account has been standing almost a year. A letter comes to-day stating that the bill is in excess of the contract price which was $125. This statement Black & Son find to be correct, but they find also that Mr. Bowlipp ordered the contract arrangement changed with reference to the library, adding instead much more expensive decoration. This change besides being more expensive caused a loss of time of two whole days for two men. Write for Black & Son a courteous reply offering a full explanation and urging immediate settlement.

48. You have a house which you desire to sell. Write an advertisement describing fully your property.

49. Write a receipt for a month's rent received from Thomas Hardy who lives in your house at 246 Willow Ave.

50. Write three short reading notices of your goods, to be printed in the local column of your village paper.

51. Prepare (for printing) a circular letter to be sent to your customers who are behind with their payments. Be careful to word it in such a way that your customers will not take offence.

52. Rule off a square on your paper the size of a *business* card, and write or print neatly in it such matter as you think would make a suitable business card for any business with which you are familiar.

53. For what do the following abbreviations stand: *Prox.*, *ultimo*, *i. e.*, *MSS.*, *pro tem.*, *viz.*, # ?

54. The Delaware Dairy Company, of Darby, Pa., owe a bill of

$93.20 to Elias Rogers, of Earlham, Ind., for three new patent milk condensers which they bought from him. The machines give excellent satisfaction. They desire to order three more, but wish to have Rogers send on with the machines, and at their expense, an experienced man who can put them up. Write the letter ordering the condensers and enclosing a draft for the amount of the bill already due.

55. Write a letter to the wholesale dry goods house of Pancroft, Perth & Co., 397 Madison Ave., New York City, ordering five pieces No. 2460 Black Dress Velvet, four pieces No. 1263 Black Satin, thirteen pieces No. 843 C. L. Gingham, twelve pieces No. 924 Black Dress Silk. State that these are the same as goods ordered through their traveler on a certain date (give date) last year. Ask to ship by Merchants' Dispatch at earliest date. Expect usual discount and time. Sign the letter for your firm.

56. The Wheeler Manufacturing Company of Courtland, N. Y., have written The Richmond Manufacturing Company, Richmond, Va., ordering 500 sets of certain mouldings which they use in manufacturing carriages. They have never ordered goods from your house before and ask the "usual 30 days' credit." You find them well-rated but have not in stock the particular moulding which they describe. You have something else which is very similar and which may answer their purpose. If they should order a thousand you could afford to manufacture what their order calls for. Answer fully the letter for the Richmond house.

Valuable Hints FOR Corresponding Clerks

ABBREVIATIONS. Avoid abbreviations such as "&" for "and," "× Roads" for "Cross Roads," "Balt." for "Baltimore," "Phil." for "Philadelphia," "C'wood" for "Collingwood," "Wms'town" for "Williamstown," "Jns'town" for "Johnstown," "ad." for "adv.' or "advertisement," etc.

ADDRESS. Write your name and address plainly and in full. What you intended for "N. Y." may look to the corresponding clerk who reads your letter like "N. J." Contractions of names should be made distinct.

ANONYMOUS LETTERS. No gentleman or lady ever writes an anonymous letter.

BOTH SIDES. In business correspondence, it is better not to write on both sides of the paper. Letters so written are not easily transferred to a copying-book.

BREVITY. The subject matter of a business letter should be stated as briefly as is possible consistent with perfect clearness. Short sentences and words are preferable to long ones.

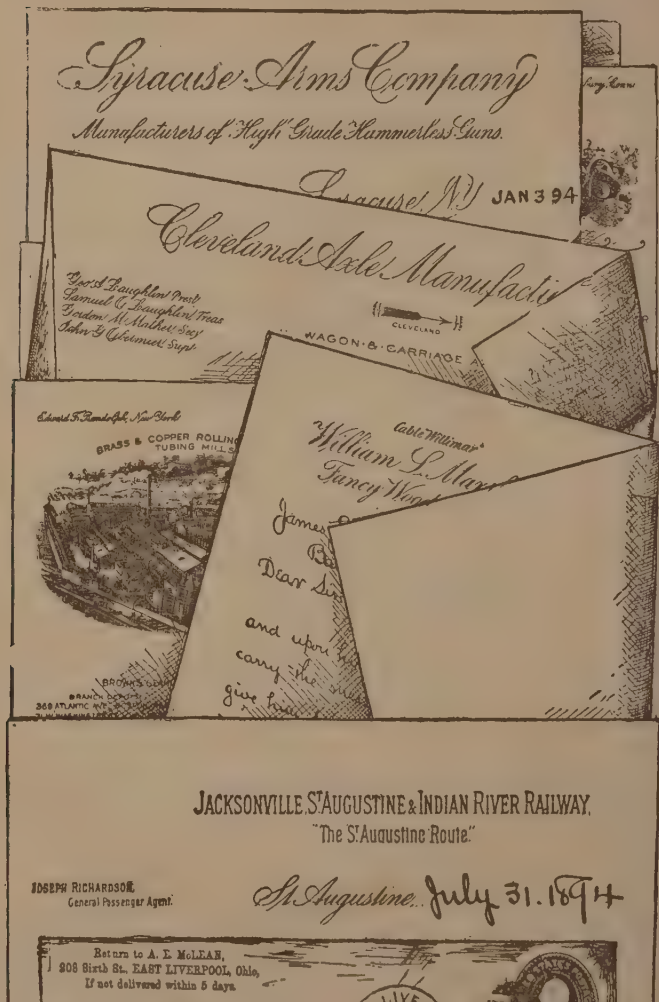
BUSINESS LETTERS should be clear, brief, direct and gentlemanly. Everything irrelevant to the business in hand should be excluded. If necessary, reference should be made to former correspondence. Every business man should keep an exact copy of all business letters which he mails. Be positive and determined but always kind and generous.

CAPTAIN. When this title is used instead of "Sir" in the salutation or complimentary close, it should not be abbreviated. The same rule applies to "Colonel" and other titles.

CARELESSNESS in spelling, blunders in construction, or want of taste in the expression of thought, often interfere with success in the business world. The business character of a man is judged of by strangers from his correspondence.

CONDOLENCE. A *Letter of Condolence* is a letter sympathizing with a friend who has suffered loss or bereavement. Great care should be taken in the writing of such letters.

COPYING LETTERS. Copies of all letters containing matter of im-


Syracuse Arms Company
Manufacturers of High Grade Hammerless Guns.
Syracuse N.Y. JAN 3 94
Cleveland Axle Manufacturing
Wagon & Carriage
Brass & Copper Rolling Tubing Mills
Dear Sir
and upon
carry the
give him
Jacksonville, St. Augustine & Indian River Railway.
"The St. Augustine Route."
Joseph Richardson,
General Passenger Agent.
St. Augustine, July 31. 1894
Return to A. E. McLean,
208 Sixth St., East Liverpool, Ohio,
If not delivered within 5 days.
East Liverpool
Apr
4
1894

portance should be preserved. A *facsimile* made with a letter press is a most satisfactory means of preserving a copy of a letter.

CORPORATION. A petition or memorial to a Board of Aldermen, or other officers, may begin with "Gentlemen," and close with "All of which is respectfully submitted."

DATE. The date consists of the month, the day of the month, and the year. It is not necessary to write the forms 1st, 7th, 23d, etc.; the figures are sufficient. Note that the proper contractions of the ordinals ending in 2 and 3 are 2d, 3d, 22d, 23d. In acknowledging the receipt of a business letter, give the date of it.

DEAR SIR. This saluation is more intimate than "Sir," and not so officious. It is preferable to "Sir" for ordinary business correspondence.

DEGREES. Scholastic degrees—M. D., D. D., M. A., A. B., etc., are always abbreviated in addresses. Titular addresses of high rank, however, such as President, Governor, Archbishop, etc., should never be abbreviated in such use. It is not in good taste to address a man as "Mr. Charles King, M. A.," or "Charles King, Esq., M. D." Titles are multiplied on title-pages and catalogues, but not more than one should appear on letters. "Esq.," as an honorary title, is going into disuse.

DOCTOR. Doctors of Divinity may be addressed "Rev. Dr." or "Rev.———, D. D." Doctors of Medicine may be addressed "A ———B———, M. D." or "Dr. A.———B———."

DON'T. Don't write illegibly. Don't write crooked. Don't use red, or violet, or green ink. Don't use fancy note paper. Don't place a "bill poster" advertisement on either envelope or letter paper. Don't direct an envelope wrong side up. Don't use postals for private correspondence. Don't write like Horace Greeley. Don't flourish. Don't write "My dear Sir" with a capital D for "dear." Don't write "&" for "and." Don't use slang. Don't cross your letter. Don't grumble on paper.

DROP LETTERS. Drop letters require postage at the rate of two cents for each ounce or fraction thereof at letter-carrier offices, and one cent at all other offices.

ENVELOPES. In social correspondence, the envelopes, like the paper, should be white and plain, and should correspond to the paper used in size and quality. The square envelope is not generally used

for business correspondence. It is considered bad taste to use colored paper.

ERASURES. Avoid all erasures or blots, even if you have to re-write your letter. Avoid writing with a pencil, or with other than black ink.

ESQUIRE. The correct abbreviation is "Esq.," not "Esqr." or "Esq're." In addresses, this word is accepted as the correct title of a gentleman who has no professional title. It is decidedly English, however, and is little used in the United States.

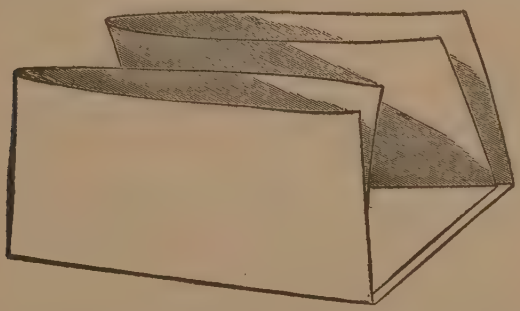
EUPHONY. Avoid the frequent repetition of the same word, or of similar sounds. Be sparing of your *and's*, and *very's*, and *so's*. The principal words of a sentence should be placed where they will make the most impression.

FIGURES. Except in writing dates and sums of money, do not use figures in the body of a letter. For example, it would be considered an error to write, "We have had 4 orders for this article already."

FIRST-CLASS MAIL. This includes letters and all other written matter, whether sealed or unsealed, and all matter sealed or tied in such a manner that it cannot be easily examined. The postage is two cents per ounce or fraction thereof. The following are a few specified articles among those subject to first-class rates: *Accounts*, whether partly or wholly in writing. *Autograph albums*, containing writing of any kind. *Bank books*, with entries in writing. *Bank checks*, when written, whether cancelled or not. *Contracts*, wholly or partly in writing. *Copies*, made by typewriter or caligraph, or other similar process. *Copies of manuscript* for publication, when not accompanied by proof-sheets or corrected proofs of same. *Deeds*, wholly or partly in writing, whether executed or unexecuted. *Designs*, or plans drawn or sketched by hand. *Diaries*, with entries in writing therein. *Drafts*, wholly or partly in writing, signed or unsigned, cancelled or uncancelled. *Envelopes*, with written addresses thereon. *Insurance policies*, wholly or partly in writing, and applications therefor. *Invitations*, wholly or partly written. *Letters*, whether written or printed (except circulars), and whether written by hand, or typewriter, caligraph or other similar process. "Old letters," whether sent singly or in a bulk. *Manuscript matter*, maps, music, or other manuscript designed for publication, unless accompanied by proof-sheets or corrected proofs. *Packages*, when sealed or sewed or otherwise closed against inspection. If one full rate be paid they will be forwarded, rated up with the defi-

cient postage. If less than a full rate be paid, the package will be treated as a short paid letter. *Printed letters*, not bearing internal evidence of being sent to several persons in identical terms. *Promissory notes*, wholly or partly in writing, signed or unsigned. *Receipts*, whether wholly or partly in writing, except receipts for subscription to, and enclosed with, second-class publications. *Stenographic* or shorthand notes. *Telegrams*, when offered for mailing are letters, and not to be receipted for unless registered. *Pictures*, *Prints*, when matter is written thereon other than the name of the sender.

FOLDING. A letter-sheet should be folded from the bottom forward, bringing the lower edge near the top, so as to make the half length a little shorter than the envelope, and then break the fold. Next fold twice the other way, beginning at the left edge, folding



towards the right. Measure these folds also, so as to fit the envelope. A note-sheet should be folded twice, from the bottom forward. When the envelope is nearly square, a single fold of the note-sheet is sufficient. If you want to make a good letter look slovenly, endeavor, by folding down a half inch at each end, to make it fit an envelope an inch too short.

FOURTH-CLASS MAIL embraces all kinds of mailable merchandise not included in other classes. The rate of postage is one cent per ounce or fraction thereof. The limit of weight is four pounds.

FRIENDSHIP. Matters of friendship, and private confidence, should never be mentioned in business communications.

HASTY REPLIES. "Many preplexing and provoking matters arise in the correspondence of a business house, and a judicious correspondent will be constantly on his guard lest he write something in

haste, and perhaps in anger, that he would afterward deeply regret. It is wise to consider carefully and act deliberately. When constrained to write severe things, the letter should be permitted to lie overnight for review before mailing. If this be done, it is probable that the character of the letter will be changed radically, or perhaps it will remain unwritten. Many letters which would seem ample provocation for a sharp reply, had better go unanswered. This advice is especially commended to those seeking trade. Kind words make and hold friends while hasty or vindictive words alienate friends and business."

HOSTESS. Be sure to write a friend, or hostess, after making a visit at her house, thanking her for her hospitality. Don't wait for a fortnight before doing so.

INITIALS. Many persons, in subscribing their name, have a fancy for giving only initials of their first, or given name; thus, R. King, J. T. Jones. No one can determine from these signatures whether the writer is Reuben or Rebecca, James or Juliet, and the person addressed who is often a stranger, is at a loss whether to send his reply to Mr. King or Miss King, Mr. Jones or Miss Jones. This is especially the case if the penmanship has the appearance of a lady's hand.

INTRODUCTION. *Letters of Introduction* are used to introduce one friend to another who lives at some distance. Do not give a letter of introduction to any one with whom you are not thoroughly acquainted. Such letters are generally left unsealed, and the name of the person introduced should be written on the lower left-hand corner of the envelope, in order that the persons on meeting, may greet each other without embarrassment.

INVITATIONS. If you have an invitation to write, write it as you would any other brief note. Let it show in its big heartedness that you mean the spirit as well as the letter of your invitation.

JUNIOR. The abbreviation of this word is "Jr." or "Jun." Its place is immediately after the name, as "William Brown, Jr., Esq." It never takes the place of any title. The same rule applies to *Senior*. Both words should begin with capitals.

LANGUAGE. A letter is but a talk on paper. The style should depend upon the terms of intimacy existing between the parties. To superiors, be respectful; to inferiors, courteous; to friends, familiar; to relations, affectionate. Write as you are in the habit of thinking or speaking, only be more particular in the selection of your words than in conversation. Short sentences are most suitable for business corre-

spondence. In social correspondence, do not be afraid to write about little things. Things worth talking about are worth writing about.

MATERIALS. Use the best stationery you can afford, and see that your letter paper and envelope correspond in quality and color. The size of the letter sheet ordinarily used in business, is either what is termed note size, about 5 by 8 inches, or letter size, about 8 by 10 inches.

MESDAMES. The contraction of this word is *Mmes.* It is the plural of the French *Madame*, and is used in English as the plural of *Mistress* (*Mrs.*). Any number of spinsters associated in a business firm, in a committee, or in any other co-operative body, should be addressed with the pro-title "Misses"; but if any one of them rejoices in the title "Mrs.," then the pro-title of the body must be "Mmes." The salutation in any case should be "Ladies."

MISS. In youth the masculine of the word is *Master*, and in adult age *Mister* (*Mr.*). This word in any form should never be used as the salutation of a letter. Not like *Sir*, *Madam*, and *General*, it cannot be used alone. In addressing a young lady, one must know either her given name or her surname; and with these one may say "Miss Mary" or "Miss Brown." In writing to strangers a woman should, in her signature, indicate not only her sex, but also whether she is a "Miss" or a "Mrs."

MISTAKES. Five million mistakes are made every year in envelope addresses, for that number of letters go astray. A Boston publisher says: "A dozen times a day we search for the name of the post office or state, in the postmaster's stamp on the envelope, and we frequently receive letters without any signature whatever. Occasionally," he says, "we find in our mail an envelope containing money but no letter." The experience of this publisher is the experience of every publisher in the country. *Don't make mistakes.*

MISTER, MESSRS. The plural of "Mr." and of "Esquire," is "Messrs." This is a contraction of the French *Messieurs* (Gentlemen). We say "Mr. President," "Mr. Speaker," "Mr. Chairman," "Mr. Editor," etc.

MISTRESS. This, the pro-title of a married woman, is almost always used in the abbreviated form, "Mrs.," and is pronounced *misses.* It is sometimes coupled with a husband's title, as "Mrs. Dr. Stone." This use is convenient, but questionable.

MONEY. In opening letters containing money, the latter should

be immediately counted, and the sum noted. Acknowledge the receipt of money promptly.

NOTA BENE. The abbreviation is N. B., and the meaning "note specially." This, like the postcript, follows the completed letter.

OFFICIALS. In letters to ordinary officials, it is customary to begin with the salutation "Sir," and close with "I beg to remain your obedient servant," or "I have the honor to be, Sir, your obedient servant."

OFFICIAL LETTERS. In official correspondence, it is better to address the office than the officer, as "To the Minister of Agriculture, etc., Sir," instead of "To the Hon. B——— K———, Minister of Agriculture, etc."

OFFICIAL TITLES. In strictly official letters, it is proper for the writer to place his official designation after or below his signature, thus forming part of his signature.

ORDERS. In ordering goods, complete directions as to the method of shipment, should always be given. In advising of the shipment of goods, say "Shipped via N. Y. C. Merchants' Despatch," or whatever the railway and transportation company may be.

ORDER LETTERS. In ordering goods or any articles state explicitly the amount, kind, etc., and what terms wanted. Always state the amount of money you send and how you send it.

PAGING. If the letter consists of more than one sheet, the sheets should be arranged in order and paged carefully.

PAPER. For social correspondence, four-page *note* size is preferable. Business men generally use single sheets *letter* size, with printed business headings. Use plain paper, either ruled or unruled. The paper should be, whether letter or note size, the best that the writer can afford. Let it be white, or with the faintest tinge possible of blue or cream. Unruled paper is to be preferred. The names of the various kinds of paper in general use are *Legal-cap*, *Bill-paper*, *Foolscap*, *Letter-paper*, *Commercial note*, *Note-paper* and *Billet*.

POSTAGE STAMPS. The proper place for the stamp is at the top of the envelope at the right margin, in the right-hand upper corner, and above the address. Put on as many stamps as the weight of the letter or parcel demands.

POSTAL CARDS. There is no need of salutation or complimentary

close. The economy that resorts to cards need not waste time and two lines on mere civilities.

POSTSCRIPT. The abbreviation P. S. is usually made use of. The ordinary use of the post-script is to add some after-thought to the letter.

P. O. Except in special instances, it is not necessary to write the letters P. O. after the name of the post office. The letter, if it reaches the town, is not likely to go to the courthouse or jail.

PROMPTNESS. Be prompt in answering all letters, but be specially so in acknowledging favors and in business correspondence.

RECOMMENDATION. "It ought to be the pride of every man who writes a letter of recommendation to feel that his letter will have weight, because it is known that he recommends only the deserving and the competent, and recommends truthfully."

RETURN STAMP. Letters about one's own affairs, to other than intimate friends, requiring an answer, should always enclose a stamp to pay return postage.

R. S. V. P. These initials stand for *respondez s'il vous plait*, (answer, if you please). They are sometimes written at the lower left-hand corner of the invitations.

SALUTATION. Do not be familiar or presumptuous, in greeting a person who is older, or more learned, or in a higher position than yourself.

SECOND-CLASS MAIL. This includes all newspapers and other periodical publications within the conditions required by the post office department and which will be furnished by any postmaster upon application. The postage on second-class matter when mailed from the office of publication is one cent per pound. Any person can mail a newspaper or magazine at the postage rate of one cent for four ounces or fraction thereof.

SIR. This title may be used apart from the name, while "Mr." must go with the name. The plural is "Gentlemen," not the vulgar contraction "Gents." "Dear Sirs" bears the same relation to "Gentlemen" as "Dear Sir" does to "Sir."

SPECIAL DELIVERY. The special delivery system has been extended to every post office in the United States, and embraces every class of mail matter. The special delivery stamp must be added in addition to the regular postage. Registered letters containing special delivery stamps are entitled to immediate delivery by messenger.

SPECIAL DIRECTIONS. If any special directions are required in connection with the envelope address, they should be put in brackets to indicate that they are not part of the address proper.

SPELLING. It is the fault of the English language that we have so many "bad spellers." If you are doubtful of a word, it will be better to look it up rather than make a blot, or a running line, where the letters are questioned. Careful reading, and lots of it, will make a good speller.

STAMPED ENVELOPE. Letters about one's own affairs, when requiring an answer, should contain a stamp or a stamped envelope for return postage.

STATES. The abbreviations of the names of states and provinces should be written with great care. What you mean to be *Me.*, may easily be taken for *Mo.*, and what you are sure is *Md.*, may be read *Ind.*

STYLE. Paragraph and punctuate carefully. Spell correctly. Write legibly and with care. Avoid blots, erasures, and interlineations. Never economize in paper by writing cross lines. In writing to the most intimate friend, a certain degree of attention, both to the subject and the style, is requisite and becoming. It is no more than we owe both to ourselves and to the friend with whom we correspond. A slovenly and negligent manner of writing is a disobliging mark of want of respect.

THE PRESIDENT. The preferred form of addressing the President is, *Hon.*————, *Executive Mansion, Washington, D. C.;* the saluation is simply "*Dear Sir.*"

THIRD-CLASS MAIL embraces printed books, pamphlets, circulars, engravings, lithographs, proof-sheets and manuscripts accompanying the same, transient newspapers, and in general all miscellaneous printed matter. The limit of weight for mail-matter of this class is *four pounds*, except in the case of single books exceeding that weight. The rate of postage is one cent per two ounces, or fraction thereof. *Printed circulars* may bear the date of mailing, address and signature in writing at third-class rates. *Reproductions* from originals by the electric pen, papyrograph, etc., are entitled to pass in the mails in sealed envelope as third-class matter. The only restrictions upon corrections to *proof-sheets* is that everything written must be part of the publication and not contain references to business or other matters. *Photographs* containing no writing other than the name of the sender, are third-class matter. A *circular* does not lose its character as such when the date or

the name of the sender is written thereon. *Packages* of third-class matter when sent in bulk to postmasters to be distributed to different persons, must be prepaid at regular rates.

TITLES. The following miscellaneous titles for use in addressing letters or notes of invitation cover the field of ordinary subscriptions: *His Excellency and Mrs. R. B. Hayes; Governor and Mrs. Geo. B. McClellan; Hon. and Mrs. Jas. G. Blaine; Sir and Lady John A. Macdonald; Rev. Dr. and Mrs. T. DeWitt Talmage; Prof. and Mrs. F. H. Anderson; Mr. and Mrs. W. H. Howland.*

STYLE IN CORRESPONDENCE. The first and indispensable quality of a good style is clearness. Generally it is enough if the writer devote his efforts simply to being understood. Plainness and clearness are the foundations upon which all other qualities are built. Too exclusive endeavor after precision may make the style stiff and angular. It is always unwise to impair the thought for the sake of the expression. To the quality of clearness must be added the quality of force. In a letter the spirit of the writer should show itself. The strongest thoughts find brief expression. As a rule the language which simply suggests the thought is more interesting than that which gives it full expression.

SLIPS IN GRAMMAR Corrected

Plurals.

Be careful in writing such plurals as moneys, journeys, valleys, chimneys, turkeys, negroes, calicoes, buffaloes, sons-in-law, solos, twos, quartos, step-sons.

Verbs and Numbers.

Follow plural subjects with plural verbs; as, we *were*, not we was; you *were*, not you was; they *are*, not they is; they *were*, not they was; they *have*, not they has; they *write*, not they writes; the men *are*, not is; the children *were*, not was; the boys *have*, not has; my sisters *write*, not writes; they *are* the boys who *were* at school. Jennie and Annie *were* schoolmates.

To Do; to See.

These two verbs give considerable trouble. Their principal forms are, *do*, *did*, *done*, and *see*, *saw*, *seen*. The second forms, *did* and *saw*, should never follow *is*, *are*, *was*, *were*, *have*, *has*, or *had*. The third forms, *done* and *seen*, should always follow one of these words expressed or understood; as, I *did* the work, or I *have done* the work, or the work *is done*. I *saw* the picture, or I *have seen* the picture, or the picture *was seen*.

Verbs in General.

The rules given for *to do* and *to see* apply alike to all verbs. Such expressions as *have came*, *have sang*, *was drove*, *have broke*, *have began*, *have knew*, *is froze*, *have gave*, *knowed*, *has went*, *has give*, *has rang*, *have ran*, *were took*, *has stole*, *throwed*, *have mistook*, etc., are gross errors and should be avoided.

Possessives.

The possessive of nouns, both singular and plural, is formed by adding an apostrophe and "s" ('s); as, The *man's* hat is on the table The *children's* playground is behind the house. When a plural noun

ends in "s," only the apostrophe (') is added · as, the *pupils'* lessons should be explained. *Birds'* nests attract boys. The apostrophe is never used in forming the possessive of pronouns.

I, Me, He, Him, She, Her.

Many persons continually make mistakes in conversation and in correspondence in the use of these words. The following are examples: Let you and *I* go; say, *me.* He is as good as *me;* say, *I.* She is as tall as *him;* say, *he.* You are older than *me;* say, *I.* Nobody said so but *he;* say, but *him.* John went out with James and *I;* say, and *me.* You are stronger than *him;* say, than *he.* Between you and *I;* say, you and *me.* He gave it to John and *I;* say, and *me.* Your brother was with Mrs. Brown and *I;* say, and *me.* He sat between him and *I;* say, *me. Me* and *him* can carry it; say, *he* and *I. Her* and her sister are coming; say, *she* and her sister. *Her* and *him* are the same age; say, *she* and *he.* Was it *her;* say, *she.* If I *was him;* say, *were he.*

We, Us, They, Them, Who, Whom.

Errors in the use of these pronouns are frequent. *Us* boys enjoy the holidays; say, *we* boys. *Who* is it for? say, *whom.* Was it *them?* say, *they. Who* did he choose; say, *whom.* Who did the mischief? *Them;* say, *they.* Be careful *who* you trust; say, *whom.*

Comparison.

Do not use the *superlative degree* where only two things are compared; as, he is the *best* of the two; say, *better.* Jennie is the *eldest* of my two sisters; say, *elder.* Avoid double *comparatives* and double *superlatives;* as, A *more healthier* location cannot be found; say, *more healthy.* He took the *most pleasantest* route; say, *most pleasant,* or *pleasanter.*

Negatives.

Do not use two negative words so that they shall contradict each other; as, He *didn't* do *nothing;* say, *did nothing,* or *didn't* do *anything.* He is *not* there, I *don't* think; say, I *think.*

Adverbs.

Do not use adverbs for adjectives, nor adjectives for adverbs; as, The river rises *rapid;* say, *rapidly.* He does his work *slow;* say, *slowly.* She looks *charming,* not *charmingly;* I feel *bad* over it, not *badly.* He did his work *well,* not *good.*

Prepositions.

The needless insertion of a preposition is to be avoided, as, *In* what latitude is Boston in? Care must be taken to connect prepositions with appropriate verbs and nouns; as, This book is different *to* that; say, *from* that. I was followed *with* a crowd; say, *by* a crowd. He is angry *at* his father; say, *with* his father.

Collective Nouns.

When the idea of *unity* is prominent, collective nouns take singular verbs; as, The fleet *was* under orders to sail. There *was* a large crowd in the building. Your committee *begs* leave to report. When the idea of *plurality* is prominent, collective nouns take plural verbs; as, The public *are* requested to be present.

Shall, Will.

Will expresses the will or pleasure of its own subject. *Shall* subordinates the will of its subject to that of the speaker. "We *will* go," means "we are willing to go." "We *shall* go," means "we have decided upon going." Never say "*Will* I do so and so?" The literal meaning of such an expression would be, "Am I *willing* to do, etc." Remember that *will* always expresses *willingness* rather than *futurity* when it has a personal significance.

Similar Tense Forms.

Lie, lay, lain; lay, laid, laid; sit, sat, sat; flee, fled, fled; fly, flew, flown; flow, flowed, flowed; rise, rose, risen; raise, raised, raised. His roommate *lies* in bed until noon. The apples *lay* on the ground all winter. He has *lain* on the floor since morning. He *laid* the book on the table. I have *sat* here for more than an hour. She *set* her pitcher on the ground. They will *flee* from the plague. The river has *overflowed* its banks. John *raised* the flag.

Errors to be Avoided.

Administer. Blows are *dealt*. Medicine is *administered*.
Afraid. Say I *fear* it will rain, not I am *afraid*.
Agriculturist. Not *agriculturalist*.
Alike. Do not couple this word with *both*.
All over. *Over all* the country, not *all over* the country.
Allow. Do not say, "He *allows* he will do it."
Alone. Distinguish this word from *only*.
Amateur. Not necessarily a beginner.
And. Say try *to* go, not try *and* go.

Angry. Say angry *with* a person and *at* a thing.
Answer. Answer *questions*; reply to assertions.
Anticipate. Distinguish from *expect.*
As. Say not *that* I know, instead of not *as* I know.
At all. Superfluous in "any *at all.*"
Atheneum. Pronounce *ath-eh-nēe-um.* Accent 3d syllable
Asphalt. Pronounce *ess-fahlt*, not *ash-fault.*
Awful. A thing cannot be *awful* pretty.
Balance. Not to be used for *rest* or *remainder.*
Beautifully. Looked *beautiful*, not *beautifully.*
Beg. Say "I *beg leave* to acknowledge."
Belongs to. Do not use for *is a member of.*
Between. *Between* two; *among* more than two.
Blacking. This word is not *blackening.*
Brakeman. Not *brakesman.*
Certain. Distinguish from *sure.*
Character. Distinguish from *reputation.*
Deal. Great *deal*, not good *deal.*
Die with. Persons die *of*, not *with* disease.
Disremember. Say *forget.*
Don't. Say he *doesn't* sing, not he *don't* sing.
Either. Means the one or the other of two.
Either alternative. Alternative means choice.
Equally well. Do not say *equally* as *well.*
Every. Followed by a verb in the singular.
Expect. Refers to future time.
Fix. Incorrectly used for *arrange* or *prepare.*
Folk. *Folk* implies plurality as well as *folks.*
Gent. Never use this contraction of *gentlemen.*
Good. "It looks *good.*" Say *well.*
Got. Omit *got* in "I have *got* a dollar."
Granary. There is no such word as *grainary.*
Guess. Do not use this word for *suppose.*
Had have. Never use together.
Hardly. Do not use with *don't* and *can't.*
Healthy. Distinguish from *wholesome.*
Hundred. Use the singular form with numerals.
Idea. This word is not *idea-r.*
Just. Incorrect in the sense of *now.*
Learn. To receive instruction. See *teach.*
Less. Relates to quantity; *fewer* to number.
Loan. *Lend* is considered a better word.
May. Distinguish from *can.*
Near. Do not use in the sense of *nearly.*
New. "A pair of new boots;" not "a new pair."

Nice. Think twice before using this word.
None. Contraction of *no one*, takes singular.
One. Followed by *one*, and not by *be*.
Otherwise than. Not *otherwise but*.
Party. Do not use this word for *person*.
Perpetual. Distinguish from *continual*.
Portion. Often incorrectly used for *part*.
Portion. A *portion* is a *part* set aside.
Posted. Do not use instead of *informed*.
Prevalent. Distinguish from *prevailing*.
Promise. Distinguish from *assure*.
Propose. Distinguish from *purpose*.
Prudence. Distinguish from *discretion*.
Quantity. Things measured or weighed.
Real. The adverb is *really*; as, *really* good.
Remember. Distinguish from *recollect*.
Returned back. The prefix *re* means back.
Seem. Distinguish from appear.
Settle. To *settle* does not mean to *pay*.
Shampoo. Not *shampoon*. Shampooing.
So, such. *So* long journeys, not *such* long.
Some better. Say *somewhat* better.
Splendid. Splendid things glitter.
Stop. We *stay* at a certain hotel, not *stop*.
Streamlet. Do not use with *little*.
Summon. *Summon* is a verb, *summons* a noun.
Teach. To give instruction. See *learn*.
Those kind. Say *that kind*. *Kind* is singular.
Transpire. Do not use for *to happen*.
Try. We *make* an experiment, not *try*.
Vacation. Distinguish from *vocation*.
Widow woman. *Woman* is here superfluous.
Without. Do not use *without* for *unless*.
Year-old. A *two-year-old* colt, not a *two-years*.
Yours. Never close letters with "*Yours, etc.*"

How to Earn and Get A Good SITUATION

Be Good for Something.

No use applying for a situation if you cannot do anything. Encourage and develop some one talent for the use of which the world offers a money value. The man who can do almost anything fairly well isn't drawing half the salary of the man who can do one thing better than other people.

Never be Idle.

If you are out of work and can't find any, go and help some poor fellow who has more than he can carry. Don't consider that you are doing him a great favor either. He is really doing you the favor. For every one man who can't find work, there are five who have more than they can do. If you read your bible, you will find that the men whom God called to higher work were not standing around with their hands in their pockets waiting for a job.

Never Despair.

You can do almost anything you make up your mind to do, and resolve upon doing, willingly and earnestly. Do not be afraid of pounding persistently at one thing, even if people do call you a crank

Get at Something.

If nothing turns up, turn something up. The man who is at work has ten chances to get a better place for one chance the man who is out of work has to get anything to do. If the place isn't good enough or the pay not big enough, fill the place chuck full, so that you will bulge over a little where people can see you, and earn every cent of the pay. The people who are most tired in this world are working for themselves and not for the good of others.

Market Overstocked.

The market is always overstocked with middling work of all sorts, while first-class work in every department of human effort is always so scarce as to command high prices. Every employer knows that when he has need of a man capable of really first-class work, he must search diligently for him, and pay him a high price when he is found.

Life's Failures.

A large percentage of life's failures are due to people's persistent attempts to do things for which they are not fitted. A blunder of this kind at the outset is almost sure to embarrass one through life. The trouble comes mostly from a mistaken notion of respectability. One kind of labor is as respectable as another if it is honest labor and the world demands it. However, there is a genuine dignity and honor in the pursuit of callings requiring intellectual strength and culture or technical knowledge and skill.

The Choice of a Career.

There are times in a young man's life when he is beset as to what he shall do for a livelihood, and the question as to a choice of what the world offers is a very important one. The first thing to notice is that educated labor is nearly always in demand. The men who are doing the longest day's work for the smallest daily wages, who are in a sense the slaves of their employers, are the uneducated. The essential thing is to have an object in life, an ideal within you that will raise the character and excellence of your work. About the most unfortunate man in all the world, next to the man who has nothing to do, is the man who is working simply for wages or salary and not for the love of the work. Successful men are successful in spite of difficulties. They owe their success largely to the fact that they had the snap and persistence and ambition to succeed. They learned to climb mountains by climbing them. Be thorough. Know the top and bottom, inside and outside, cause, cost, and effect, and both ends of everything you are required to do or handle. Watch out always for larger and better opportunities. Good opportunities exist around us all the time, which, if promptly seized upon, lead to fortune and reputation. In no country in the world are the possibilities of a successful career more numerous than in the United States. If you will study the career of any great man you will find that it was the opportunity that made him Inspiration and suggestion frequently come from sources that are leas thought of. Grant might have remained a tanner in Galena if his opportunity had not come in the civil war. Sometimes a man makes or forces the opportunity, but usually the opportunity forces and makes the man. Be careful to choose what you have a *bent* for but when you are fully started, let "this one thing I do" be your business motto. "Keep everlastingly at it." Remember what Macaulay said: "The world generally gives its admiration, not to the man who does what nobody else ever attempts to do, but to the man who does best what multitudes do well."

Better Chances.

There is a prevalent belief among young men that there are more and better chances for advancement in the professions and in commerce than in mechanical pursuits. Young people ponder the stories of men who, beginning as office boys, have become chief clerks, junior partners, and ultimately seniors in great houses, until these come to represent, in their eyes, the ordinary and probable course of affairs. They forget that success of this kind can come to but one man in two or three thousands, and that when it does come it is the result of something more than mere chance. To a young man with capital in reserve, or with its equivalent in influence, or, better still, with extraordinary capacity, a clerkship may offer a reasonable prospect of ultimate advancement, but without one or another of these conditions, the chances are more than a thousand to one that he will never succeed in making more than a bare support for himself, while the overcrowded condition of the ranks in which he stands makes his position a precarious one always. The mechanic, on the other hand, brings a definite skill to bear upon the problem of money making. Only those who are similarly skilled can compete with him for employment. His skill is a positive capital, and his work is always productive.

Easy Money Getting.

The era of easy money getting is rapidly passing away. In trained ability is there only any real safety from want. No man who is without a thorough knowledge of some business is ever safe. The work of developing our country's resources is only fairly begun, but it is so well begun that only skilled labor is wanted in its further accomplishment. The indifference with which young men habitually allow themselves to drift listlessly into avocations for which they are by nature unfit; the confidence with which they trust chance to do for them that which they should do for themselves; and the blind recklessness with which they neglect to acquire a skill that may serve them in their life struggle, is very much to be regretted. Don't, however, wait until you get something to fit you. Better get at something that doesn't fit, than to be idle.

Christian Conditions.

There are christian conditions of success which all should consider. The merchant who is honest that he may make money is not honest and may fail. He only is christian who counts honesty of more worth than money or fame. No matter what your calling, be truly true

and faithfully faithful, and if you fail in the "hundred-fold now, in this time," it will be abundantly made good in the "life everlasting."

Give Good Measure.

The bible measure is "pressed down, shaken together, and running over." This doesn't mean seventeen ounces for a pound or thirty-seven inches to a yard, but rather good measure of yourself—to your work, to your employer, to others—and good measure will be returned in due time.

Don't Quit

A good position until you are sure of a better one. Remember that the very best positions are secured through promotions and not by answering advertisements. The boys who are always looking for nice, easy positions at fat salaries, never get them.

Don't Try Everything.

The applicant who answers all advertisements, and claims ability to fill each position, will stand a poor chance to get an appointment. If you are satisfied that you can fill the requirements, put forth your best facts to prove it.

Don't Tell Your History.

It will not be necessary to say how well bred or how well educated you are. Show this by the moderation of your statements, the conciseness of your facts, by correct spelling and good grammar, by a neat and respectable letter. Write such a letter as will obtain for you an interview, and your manners can then be made manifest.

Use Good Stationery—

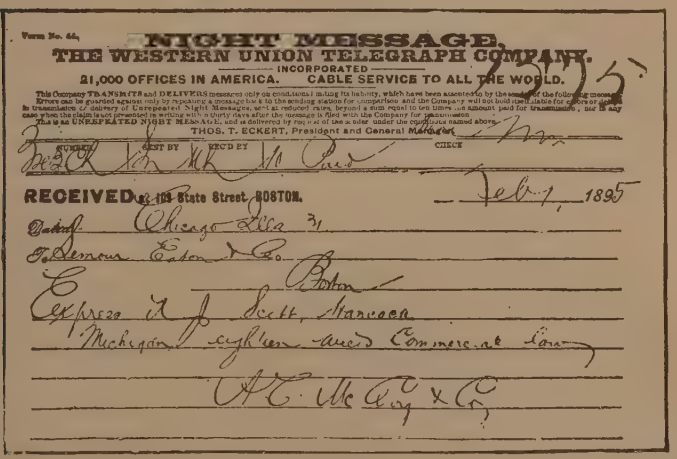
Not that of your present employer. The longer you have been with one house the more valuable you will appear to a new one. Don't enclose postage stamps for reply. It is a useless expense. If your letter is the one chosen, the advertiser will spend two cents to see you. Use the ordinary-shaped business envelope. All fancy stationery goes into the waste-basket without being opened.

Be Frank and Sincere.

Don't waste your time and the advertiser's by applying for a position which you are unable to fill. An office boy cannot expect to get a job as business manager of a large corporation, and a young man of twenty-five, no matter how smart he may be, will not be chosen as a bank president.

Communication By TELEGRAPH

Only those who have large business interests can form an idea of the enormous amount of telegraphing done annually. Perhaps 400,000,000 messages a year would be an underestimate. These figures in connection with the fact that it was not until 1850 that the telegraph came into general use make a very remarkable showing. In 1866 the rate for a ten-word message across the continent was $10, with 77



Form No. 44.

NIGHT MESSAGE.

THE WESTERN UNION TELEGRAPH COMPANY.

INCORPORATED

21,000 OFFICES IN AMERICA. CABLE SERVICE TO ALL THE WORLD.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the Company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Night Messages, sent at reduced rates, beyond a sum equal to ten times the amount paid for transmission; nor in any case when the claim is not presented in writing within sixty days after the message is filed with the Company for transmission.

This is an UNREPEATED NIGHT MESSAGE, and is delivered by request of the sender under the conditions named above.

THOS. T. ECKERT, President and General Manager.

SENT BY | RECD BY | CHECK

RECEIVED at 115 State Street, BOSTON. Feb 7, 1895

Dated Chicago Ills 31

To Denison Eaton & Co

Boston

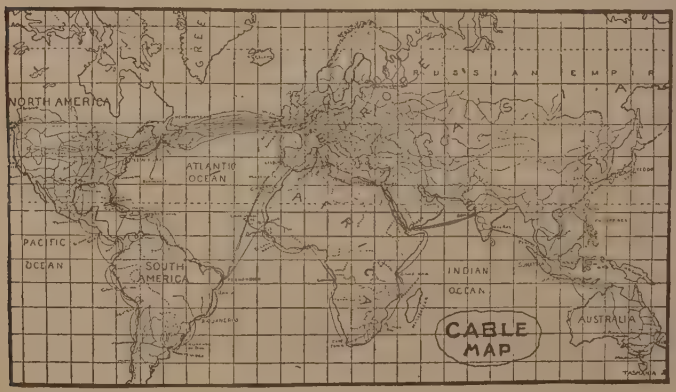
Express A J Scott, Harwood

Michigan eighteen acres Commercial Farm

A C McClurg & Co

cents for each additional word. The Atlantic cable of 1866 charged $100 for twenty words. Now the rate is 25 cents per word. It usually takes from two to four hours to send a cablegram to England and receive a reply. If there were no overcrowding of wires, no changes, no delays from other messages having the right-of-way, a message might receive a reply in almost as many minutes. An instance is given of a message from London to Teheran, Persia, sent by the Prince of Wales,

which was answered by a return click in less than a second of time. Important newspaper news crosses the Atlantic and is bulletined by the press in three minutes. The delays in commercial messages are almost wholly the result of the volume of business which must be taken in the order in which it is received. By the close connection of the telegraphic systems of the world under what is known as the Telegraphic International Union, telegrams may be sent to any foreign point where there is a telegraph office and with the least possible delay. Every company guarantees the passage of messages without inspection, and does its utmost to secure a rapid and exact transmission. By writing in Latin characters a message can be sent through any country no matter what its language. The operator gives the letters in the telegraphic



form it matters not whether he understands the meaning of the words or not. The message will always remain in the language in which it is written. In many countries the telegraph lines are owned and operated by the government and payment of messages is made in postage stamps attached to the written message when handed to the operator. The United States systems are owned largely by the Western Union Company and the Postal Telegraph Company. These great systems require many thousands of the brightest young men and young women in the world. A quick mind, prompt action, and a ready hand are essential to catch, transfer, and forward electric flashes. A word or two about telegraphic messages. If your message is a very important one, it is well to have it *repeated*, that is, telegraphed back to the originating

office for comparison. One half of the regular rate additional is charged for this. The telegraph companies will not be responsible for mistakes or delays in the transmission or delivery of unrepeated messages. Remember that letters such as C. O. D., or figures, as 347, will each be considered three words in reckoning the cost of the telegram. There is no charge for the address of the person to whom the telegram is sent or for the signature of the sender.

EXAMINATION EXERCISES.

1. The German-American Institute, 243 River Avenue, Pittsburg, Pa., wires the educational Book Co., 241 Clinton Place, New York City, for one hundred and twenty-five copies of Brown's Junior Class Book of Chemistry, to be sent by express C. O. D. Write the telegram using only ten words.

2. The Bancroft Book Company, of 249 Main Street, St. Paul, sends a telegraphic message to Hollingswood & Whiting Company for one hundred and forty-five reams of French bond paper, light blue tint, 20x24, and heaviest weight they have. Paper to be shipped by Merchants' Dispatch at earliest possible date. Write this message Do not exceed fifteen words.

3. Write a telegraphic message to the Educational Book Company, 241 Clinton Place, New York City, asking them to send you by express C. O. D. one hundred copies of Homer Hamilton's Practical Grammar, fifty copies of Dr. Pancroft's Civil Government, and sixty copies of Casey's Geometry. All to be billed at introduction prices. Do not exceed fifteen words. Date to-day. Sign for Cedar Hill Seminary, Windermere, N. Y., *Bruce Highland, Principal.* (Note. Letters C. O. D. count *three;* figures 100 count *three.*)

4. The Hubley Printing Company, (L't'd), York, Pa., order by telegraph from the Hollingswood & Whiting Co., Boston, to be forwarded by express, five thousand paper bags, grade A, four thousand paper bags, grade C, and two thousand paper bags, grade D. Write the telegram. Do not exceed ten words.

The "want" advertisement calls for a young man who is a "ready penman and quick at figures." These are necessary qualifications. Every person has more or less to do with figures, and any rule likely to lessen labor or make the result more certain should be received with favor. The rules presented in this chapter are the best of which the author has any knowledge.

1. How to add rapidly.

Write the numbers in vertical lines. Where a number is repeated several times, multiply instead of adding. In adding horizontally, begin at the left, since the eye is more accustomed to moving from right to left than left to right. Think of results and not of numbers themselves. Thus, do not say 3 and 4 are 7, and 8 are 15, and 9 are 24, etc.; but 7, 15, 24, etc. Make combinations of 10, or other numbers, as often as possible, and add them as single numbers. Thus in adding

$$5+\overline{4+3}+\overline{8+2}+\overline{3+1+4}+9+\overline{4+5}+\overline{7+3}$$

say, 5, 12, 22, 30, 39, 48, 55, taking each group at a glance as a single number. After sufficient experience the mind grasps the figures almost unconsciously, and the result is reached as quickly as the eye can glance along the line with attention. Practice a half hour each day, and in a month the result will astonish you.

2. The Cashier's Method.

This rule is applicable to any kind of exercise. We add each column separately, putting down the sum to the right.

$2354.21	20
362.45	28
1598.46	32
9328.75	29
4859.82	28
8621.31	24
$27125.00	$27125.00

For instance, the sum of the numbers in the first column is 20, in the second 28, in the third 32, and so on. This method is of special value to bank clerks and others who may be disturbed while adding very large amounts. It does away entirely with the process of carrying.

3. The Cash Boy's Fractions.

Suppose it is necessary to find the sum of $\frac{1}{4}$ and $\frac{1}{5}$, or any other two fractions with *ones* for numerators. To find these sums add the denominators, 4 and 5, for the numerator of the answer, and multiply them for the denominator. To subtract them, subtract the denominators for the numerator of the answer, and multiply them for the denominator. This rule applies to all similar fractions, and is well worth remembering.

$4+5=9$
$4\times5=20$

4. The Excess Rule.

If you wish to multiply any two numbers, each of which is a little larger than 100, you will find this rule very helpful: Multiply the excesses—that is, 23 by 4—and put down the product, 92, two places to the right as in the illustration. Then add the two numbers, 104 and 123, omitting one of the *ones* at the left. Carry when necessary. Apply this rule to any similar numbers such as 112 by 106, or 122 by 105, or 135 by 103.

123
104
12792

5. The Lightning Calculator's Rule.

The best expert cannot add a column of *ones* any faster than you can. It may be worth your while to study this secret. Teacher and

it very helpful when they are obliged to give long addition exercises to the children and wish to be saved the labor of addition themselves. Note that the second line added to the first makes *nines*, except at the right, where two figures add to *ten*. The third and fourth, and fifth and sixth lines of figures are similar. The two last rows are small numbers written down at random. Now, to get the answer, begin to the left if you wish. Write down 3, which is the number of "couplets" of figures above, then add only the two rows at the bottom, saying (mentally) 2 and 1 are 3, 3 and 2 are 5, 4 and 3 are 7, 0 and 2 are 2, 2 and 1 are 3, and 5 and 3 are 8. This exercise can be varied greatly by writing the two, or three or four lines at the bottom, or by placing one of these lines at the top and one at the bottom.

```
324532
675468
253361
746639
123445
876555
123213
234025
-------
3357238
```

6. How to Prove Addition in a Minute.

This is an old rule in a new dress. It is certainly a novel and practical method of proving addition. It is really a modification of the old method of casting out the *nines*, which is familiar to every one.

```
324632=20=  2
256398=33=  6
546312=21=  3
856659=39=12=3  } =34=7
725733=27=  9
334694=29=11=2
446859=36=  9
-------------
3491287=34=7
```

Add the figures in each line. The first adds to 20 and their sum is 2. The second adds to 33 and their sum is 6. The third adds to 21 and their sum is 3. The fourth adds to 39 and their sum is 3, and so on. In each case keep on adding until you have reduced the line to one figure. Now find the sum of all these *unitates*. You will get 34, and the sum of 3 and 4 is 7. In this way you reduce the whole example to a *unit*. Now do the same with your answer, and if your addi-

tion is correct the *unitate* in each case will be the same. Note this example:

$$\left.\begin{array}{l} 8943=24=6 \\ 2586=21=3 \\ 3472=16=7 \\ 5963=23=5 \\ 3485=20=2 \\ 2157=15=6 \end{array}\right\} =29=11=2$$

$$26606=20=2$$

Very little practice will make it necessary to write down the *unitates*. They can easily be added as obtained.

7. The Complement Rule.

We have already learned how to multiply two numbers, each of which is a little greater than 100. Now take two numbers, each of which is a little less than 100, 98 by 94 for instance. The *complement* of a number is the difference between the unit of the next higher order.

98 - - 2 (Complement)
94 - - 6 (Complement)
9212

Thus the complement of 98 is 2; of 94 is 6; of 987 is 13, etc. To multiply these two numbers, multiply the complements, 2 and 6, and place the product, 12, in the answer. For the remaining two figures, subtract across, either the 2 from the 94, leaving 92, or the 6 from 98, leaving 92. Apply this rule to as many exercises as you wish. Try the following: 97×98; 99×96; 94×89.

8. The Nine-nine-nine Rule.

This is really Rule 7 applied to larger numbers. Suppose you wish to multiply 895 by 994. As in Rule No. 7, write the complements to the right. Now multiply 105 by 6 and place the three figures in the product. Then to get the remainder of the product subtract either the 105 from the 994, or the 6 from the 895. The 889 might be got by addition. If you add 895 and 994, you will notice that the first two figures, 5 and 4, give the 9, then 9 and 9 are 18, put down 8 and carry *one*, then 1 and 9 and 8 are 18, put down 8 and drop the *one* entirely. This is perhaps easier than subtracting.

895 - - 105
994 - - 6
889630

9. The Salesman's Rule.

Suppose you want to find the value of 128 yds. at 75 cents. Now to find the value of any number of yards of cloth at 75 cents a yard, or any number of articles at 75 cents each, deduct one-quarter of the number from itself and call the remainder dollars. At one dollar a yard the answer would be $128; then at 75 cents it must be three-quarters of this, or one-quarter less. At 87½ cents deduct one-eighth. At 66⅔ cents deduct one-third.

128
32
$96

10. The Lock-stitch Rule.

If you wish to multiply any number by 11, you will find this rule very helpful. For instance, if you wish to multiply 23 by 11, you simply add the 2 and 3 together and place the sum between the two original figures. To multiply 326,753 by 11. Put down the right hand figure, 3. Then say, 3 and 5 are 8. Then, 5 and 7 are 12, put down 2 and carry 1. Then, 1 and 7 and 6 are 14, put down 4 and carry 1. Then, 1 and 6 and 2 are 9. Then, 2 and 3 are 5. Then write the left-hand figure, 3. This is a very simple method. Try a few exercises, first working them the long way, then by applying this *short-cut*.

23×11=253
3594283

11. The Lowell Rule. No. 1.

To multiply any two numbers of two figures each, when the right-hand figures add to 10 and the left-hand figures are the same: For instance, 76 by 74. Multiply the two right-hand figures, 6 by 4, placing 24 in the product, then carry 1, and multiply 7 by 8, placing 56 in the product. Always carry *one*, adding it to one of the left-hand figures. Apply this rule to any similar numbers, such as 24 by 26, 35 by 35, 27 by 23, 81 by 89, 42 by 48.

76
74
5624

12. The Lowell Rule. No. 2.

The rule explained in No. 11 can be applied to large numbers. Take, for example, 298 by 292. Here the left-hand numbers (29) are the same, and the right-hand numbers add to 10. Say twice 8 are 16, and put down both figures. Then carry *one* to 29, and you have 30. Now, it is quite easy to multiply 29 by 30 mentally. The product is 870, all of which is placed in the answer. Apply this rule to 104 by 106, 112 by 118, 152 by 158, 127 by 123, 993 by 997.

298
292
87016

13. The Square Rule.

To multiply numbers such as 37 by 43. Here the mean number —that is, the number which is as much greater than 37 as it is less than 43—is 40. Forty, squared, or multiplied by itself, gives 1600. The square of 3, the difference between the mean number and one of the numbers, is 9. 1600—9 =1591=the product of 37 and 43. Apply this rule to 87 by 73, 63 by 57, 22 by 18, 1009 by 991, 116 by 124. The entire work should be done mentally.

```
 40
 40
1600
   9
1591
```

14. Rule No. 4. Extended.

If you wish to multiply two large numbers, each of which is a little over 1,000, such as 1,235 by 1,003, proceed as in Rule No. 4. Multiply the excesses, that is 235 by 3, carrying the product, 705, three places to the right. Then add the numbers, omitting one of the *ones* at the left. Apply this rule to such numbers as 1,312 by 1,003, 1,199 by 1,005, etc.

```
1235
1003
1238705
```

15. Multiplication by Subtraction.

It is easier for most people to subtract than to multiply. Instead of multiplying by 9, we multiply by 10 and subtract the number from this product.

$$8435625\times9=84356250$$
$$\underline{\quad\quad 8435625}$$
Product $$=75920625$$

To multiply by 99, add two cyphers and subtract; to multiply by 999, add three ciphers and subtract, etc.

16. From an English Arithmetic.

To multiply two small numbers, each of which ends in 5, such as 35 and 95, take the product of 3 and 9, increase this by one-half of the sum of these figures, and prefix the result to 25. Thus:

```
 35
 95
3325
```

$5\times5=25$
$9\times3=27,\ 27+\frac{1}{2}(9+3)=33$

This rule will be found to hold good with any two numbers each of which end with 5. Apply it to such numbers as 45 by 85, 35 by 75, 95 by 45, etc.

17. The Single Line Rule.

In multiplying any number by 21, or 31, or 401, or any number of two figures where the last is one, or of three figures, where the last two figures are 01, a good deal of time can be saved by abbreviating the ordinary process as here illustrated. For instance, suppose we have to multiply 231,423 by 21. Instead of putting down 231,423 with 21 under it, then drawing a line, multiplying by 1, then by 2 or 20, then adding, as is the ordinary custom; all that is necessary is simply to multiply by the 2, placing the product, one figure to the left, and then to add. Try this method, using 31, 51, 61, 91, 201, 3,001, and 901 as multipliers. There is a saving in the above example of eight figures.

```
231423
4628460
-------
4859883
```

18. How Some Accountants Add.

It is quite common with accountants to put down both figures, as in the illustration. The sum of the first column is 26; carrying 2, the sum of the second column is 29; carrying 2, the sum of the third column is 14; carrying 1, the sum of the fourth column is 19, and the total is 19,496. The total is found by taking the 19, and the right-hand figures of the other three partial sums. There is an advantage in this method, if you desire to go back and add a column a second time.

```
8596  26
3438  29
5379  14
2083  19
-----
19496
```

19. English Invoices and American Money.

Invoices of goods bought in English markets are in pounds, shillings and pence. The money items have, of course, to be changed to our currency. When money is at par value, and for nearly all practical purposes, the following is the best and shortest method of reducing English money to dollars and cents. This rule appeared originally in "The New Arithmetic" by the author of this publication. It has since been copied into several text-books.

Begin by reducing the shillings and pence to the decimal of a pound as follows: *Write one-half of the greatest even number of shillings as tenths, and if there be an odd shilling, write five-hundredths; reduce the pence to farthings and write their number as thousandths. If the number of farthings is between 12 and 36, add one to the thousands: if between 36 and 48, add two to the thousandths.*

£3 14s 6d=£3.725

NOTE.—Divide 14 by 2 and put down 7; then multiply 6 by 4 and add 1, getting 25.

£4 15s 10d=£4.7$\frac{5}{12}$=£4.792

The pound sterling is equal to 4.86\frac{2}{3}$. Now 80 is $\frac{1}{5}$ of 400, 6$\frac{2}{3}$ is $\frac{1}{12}$ of 80. Then, to multiply by 486$\frac{2}{3}$, multiply by 400; divide the product by 5 and place the quotient under; then divide the quotient by 12, and place the second quotient under the first. Add, and the sum will be the same as though the number were multiplied by 4.86$\frac{2}{3}$ in the ordinary way.

Find the value of £3.725 in dollars and cents.

£3.725
4

5 | 14.900
12 | 2.980
.248

$18.128

£3.725×4.86$\frac{2}{3}$=*Ans.*

Multiply by 4 for the dollars. Then divide this product by 5, which is equivalent to multiplying £3.725 by 80; then divide 2.98 by 12, which is equivalent to multiplying £3.725 by .06$\frac{2}{3}$.

20. To Multiply by 21, 22, 23, Etc.

This rule applies to numbers of two figures each, the first of which ends with 2. Multiply each figure in the multiplicand by the unit figure of the multiplier, adding to each separate product double the figure to the right of the one multiplied; add the tens to the last figure doubled. In this example say: Three twos=6. Three times 3 and 4 (2 doubled) = 13. Three times 4 and 6 and 1 to carry=19. Three times 2 and 8 and 1 to carry=15. Three times 3 and 4 and 1 to carry = 14. Three doubled and 1 to carry = 7. Practise this method.

32432
23
745936

21. Adding Backwards.

7343213
2345678
5432456
7214382
4132094
6863213
3426340
2534538
39291914

36
30
26
29
25
38
34
39291914

To add backwards, begin at the left-hand column, and write down the full amount of each column in regular order, bringing each total one place to the right, as in the illustration. Then add the totals in the ordinary way. A knowledge of this method serves as a ready and reliable proof to the accountant.

MISCELLANEOUS SHORT-CUTS.

22. Rule 11 applies to large numbers such as 127 by 123, or 295 by 295. By adding *one* to 29 you make 30, and it is an easy matter to multiply 29 by 30 mentally

23. You can extend the **multiplication table** to the *'teens* by the following rule: To one of the numbers add the units figure of the other and affix a cipher; increase this result by the product of the two units figures, and this will give the product required.

24. You can **prove multiplication** by the method given on page 5 for the proof of addition. Find the *unitate* of the multiplicand and multiply this by the *unitate* of the multiplier. The product should equal the *unitate* of your product.

25. The **six per cent.** method of **interest** is very simple. It is sometimes called the 60-day method. To find the interest of $248 at 6 per cent. for 60 days, you simply cut off two figures and you have the answer, $2.48. For 30 days the interest is $1.24. Then multiply by the number of months necessary. For 3 days grace you would add one-tenth, or 12c. For 7 per cent. add one-sixth. For 5 per cent. deduct one-sixth; and so on.

26. Here is an **interest rule** which is popular with some bookkeepers: Multiply the principal by the time reduced to days; then divide this product by the quotient obtained by dividing 360 by the per cent. of interest.

27. Here is **another method:** Reduce the time to months, and to the number thus obtained annex one-third of the days, which whole number multiplied by one-half of the principal will produce the required interest at 6 per cent.

28. The **Detroit rule** has some advantages: Multiply the principal, days, and rate together. Suppose this product to be 16,380. Divide by 5 and we get 3,276. Divide this by 4 and we get 819. Divide the first three figures of 3,276 by 5 and we get 65. Now add 3,276, 819, 327, and 65, and we get $4.487, the interest.

29. There are more **short-cuts** in multiplication than in any other department. If you want to multiply by 427, multiply by 7 and then by 42 which is 6 times the product by 7. This same application can be made in hundreds of numbers such as 927, 279, 728, 287, 769, 14,412, 81,273.

30. **Sometimes** the multiplier can be separated. For instance, instead of multiplying by 372, multiply by 360+12, that is by 12, first, and then that product by 30.

31. To **add** 373+391+265 in one column, begin by saying (mentally) 374 and 300=674, and 91=765, and 200=965, and 65=1,030.

32. In the **French method** the divisor is placed on the right of the dividend, and the quotient below the divisor. In the **Italian method** of division, each product is subtracted mentally from its partial dividend, and only the difference written down.

33. **Eleven** is an exact divisor of

10+1, of **100−1,** of **1,000+1,** of **10,000−1,** etc.

34. **Seven, eleven** and **thirteen** and their multiples 77, 91 and 143, are exact divisors of 1,001 and its multiples 2,002, 3,003, 9,009, etc.

35. Every **prime number,** when divided by 6, will leave a remainder of 1 or 5. Not every number is prime, however, which leaves these remainders.

36. Every **prime number** greater than 5, is an exact divisor of any number expressed by as many figures, less 1, and all alike, as there are units in the given prime number. Thus, 7 is an exact divisor of 111,111 or any multiple of it.

37. Much time can be saved in almost any arithmetical exercise involving division by **cancellation,** that is, by rejecting equal or common factors from both divisor and dividend.

38. To add two **fractions,** such as ⅔ and ¾, the shortest method is by cross-multiplication. That is, 2×4=8, and 3×3=9; 9+8=17 the numerator. Then for denominator, multiply the denominators 3 and 4, and you have 1²⁄₁₂ for answer.

39. This same rule applies to **subtraction of fractions,** except that you subtract the products instead of adding them.

40. The following is a **business method** of multiplying mixed numbers: Multiply the integers together, then multiply each integer by the fraction in the other number to its nearest unit, and add the products.

41. To square 5½, that is to multiply it by itself, say 6 times

five are 30 and add ¼. This rule applies to all similar numbers. To square 16½ say 17 times 15, and add ¼.

42. To find the value of **grain** when sold by the bushel: divide the weight by the number of pounds in a bushel, and multiply this by the price.

43. To find the value of **hay** or **coal** when sold by the ton: multiply the weight by the price and take half the product, cutting off three decimal places.

44. To find the area of a **right-angled triangle**, multiply the base by the perpendicular and take half the product.

45. To find the **circumference** of a circle, multiply the diameter by 3.1416.

46. To find the **area** of a circle, multiply the square of the diameter by .7854.

47. To find the **area** of the surface of a **globe** multiply the square of the diameter by 3.1416.

48. To find the **solidity** of a globe, multiply the cube of the diameter by .5236.

49. To find the solidity of a **cylinder** multiply the area of the base by the length.

50. To find the **hypothenuse** of a right-angled triangle, find the sum of the squares of the sides and extract the square root.

51. To find the **diagonal** of a square, multiply the side by 10, diminish this by one per cent. of itself, and divide the remainder by 7.

52. To find the **amount of lumber** in a log, making proper allowance for waste: from the square of the diameter in inches subtract 60; multiply the remainder by half of the length in feet, and point off the right-hand fig.

53. To reduce **[illegible] square timber**, multiply the square of the diameter in inches by the length in feet; take one-third of the product, and point off two figures. The result will be cubic feet.

54. To find the amount of **grain in a bin**, take four-fifths of the number of cubic feet.

55. To find the number of **acres** in a rectangular piece of land, multiply the length in rods by the breadth in rods, and divide by 160.

56. To find the capacity of a **vat** or **cistern**, multiply the square of the diameter in feet by the depth in feet, and this product by 5⅞. The result will be in gallons.

57. To find the capacity of a **square tank**, multiply the number of cubic feet by 7½, and you will get the result in gallons.

58. To **square** any number of two figures, square the units; take twice the product of the tens by the units, then square the tens.

59. To **square** any number of **nines**. Begin on the left hand and write as many nines less one, as there are nines in the given number, then write an 8, then as many ciphers as there are nines, then write *one*. Thus the square of 999 is 998,001.

60. Any number is divisible by **three** if the sum of its digits is divisible by three.

61. Any number is divisible by **four** if it ends with two or more ciphers, or if the number expressed by its two right-hand figures is divisible by four.

62. Any number is divisible by **five** if its right-hand figure be five or a cipher.

63. Any number is exactly divisible by 7, 11 and 13, if the units' period and the thousands' period are the same.

64. The product of all the **prime factors** of a number equals that number.

65. The **product** of the greatest common divisor and least common multiple of two numbers equals the product of the two numbers.

66. To multiply any two small numbers, each of which end in **one-half**, to the product of the whole numbers, add half their sum, plus ¼.

67. When (in Rule 66) the sum is an **odd number**, take half the next number below it, and the fraction in the answer will be ¾.

68. To multiply any two numbers having the same **fraction**: to the product of the whole numbers, add the product of their sum by the fraction; to this add the product of the fractions.

69. A **square** number multiplied by a square number produces a square number.

70. Any number is divisible by **nine** if the sum of its digits is divisible by nine.

71. To **multiply** any two numbers such as 86 by 84, where the first numbers are the same and the second numbers add to 10 simply say 4 times 6 are 24, carry *one*, and 9 times 8 are 72, putting down 7,224 as the product.

72. Here is a very excellent rule for finding the **area of a triangle** when the three sides are given: From half the sum of the three sides subtract each side separately, multiply the half-sum and the three remainders together; the square root of the product will be the area.

73. To find the volume of a solid **ring**, multiply the area of circular section of the ring by the length of the ring.

74. To find the sum of any number of numbers in **arithmetical progression**, as 2, 4, 6, 8, 10, etc., 1, 2, 3, 4, 5, etc., 3, 6, 9, etc., add the first to the last and multiply half the sum by the number of numbers.

75. $(a-b)\ (a+b)=a^2-b^2$.

76. To find the **diagonal** of a cube multiply its side by the square root of 3.

77. The diameter of a circle multiplied by .8862 is equal to the side of **an equal square.**

78. One half the sum of two numbers plus one half their difference is equal to the larger number, and one half the sum minus one half the difference is equal to the smaller number.

79. The square of the sum of two numbers minus the sum of their squares is equal to twice their product.

80. The difference of the squares of two numbers divided by the sum of the numbers is equal to the difference between the numbers.

81. To find the volume of a **pyramid** or cone multiply the area of the base by one third of the altitude.

82. To find the volume of a **cylindrical ring** multiply the ful diameter of the circle formed by the square of the thickness, and that product by 2.4674.

83. To estimate the weight of **coal** in any given space, multiply the contents in cubic feet by 54 for anthracite, or by 50 for bituminous coal, and the product will be the weight in pounds.

SHORTHAND MULTIPLICATION.

Under this heading we give a full and complete explanation of some peculiarities of figures which have been taken advantage of in framing rules for shortening the process of multiplication.

Multiply 34 by 36.

34
36
1224

Note these numbers. The left-hand figures are the same and the right-hand figures add to ten. To find the product, say 6 times 4 are 24, putting down both figures; carry *one*, and say 4 times 3 are 12, putting down both figures. Always carry *one*. Note the numbers to which this rule applies.

12 18	13 17	14 16	15 15		In the teens.
21 29	22 28	23 27	24 26	25 25	In the twenties.
31 39	32 38	33 37	34 36	35 35	In the thirties.
41 49	42 48	43 47	44 46	45 45	In the forties.
51 59	52 58	53 57	54 56	55 55	In the fifties.
61 69	62 68	63 67	64 66	65 65	In the sixties.
71 79	72 78	73 77	74 76	75 75	In the seventies.
81 89	82 88	83 87	84 86	85 85	In the eighties.
91 99	92 98	93 97	94 96	95 95	In the nineties.

This rule applies also to numbers of more than two figures each. Note the following examples:

112 118	113 117	114 116	115 115	123 127
129 121	132 138	193 197	194 196	295 295
392 398	393 397	491 499	792 798	996 994

The difficulty, if any, will arise in multiplying the two left-hand figures of each, for instance, in 132 by 138, we say 8 times 2 are sixteen, then carry *one*, and 14 times 13 are 182, giving the answer 18,216. When we carry *one* to 39, for instance, we make it 40, and the product of 40 and 39 is easily obtained by mental process.

Multiply 66 by 82.

66
82
5412

Here the two figures of one product are the same and the two figures of the other product add to ten. The rule is the same. Twice 6 are 12, put down both figures; carry *one*, and 9 times 6 are 54, giving the product 5,412. Note a few of the numbers to which this rule applies:

22 73	22 64	22 55	22 28	22 82	22 37
22 91	22 19	22 46	33 73	33 37	33 82
44 91	55 82	66 73	77 64	88 46	99 28

Multiply 31 by 68.

The *complement* of a number is the number which added to it makes an even ten, or an even 100, or an even 1,000. Thus the complement of 8 is 2, of 93 is 7, etc.

The complement of 8 is 2. Now suppose for the 8 in this example we put 2 and then by cross-multiplication we have $3\times2=6\times1$.

31
68
2108

Whenever (by the use of one complement) the products by cross-multiplication are equal the same rule applies. In this example say 8 times 1 are 08, carry *one* and say 7 times 3 are 21, which gives as product 2,108. This adds a very large number of numbers to our list. Note the following, and apply the rule to each:

13	13	14	28	17	24
24	31	22	16	26	18
48	22	21	21	22	23
18	19	48	67	46	44
23	24	39	24	26	36
61	34	24	42	31	26
48	46	69	42	63	84
26	27	27	29	29	29
31	31	32	32	48	34
68	97	66	94	34	62
36	68	64	96	93	41
42	36	38	38	39	88
42	43	46	86	63	84
86	84	61	47	48	48
82	93	96	12	88	62
49	68	66	26	55	97

This application of this rule holds good also with numbers of three figures each, or numbers where one factor contains three figures and the other two. It holds good also in fractional numbers. Note the following examples:

128	146	126	328	246
94	77	86	88	49
105	147	246	168	164
143	124	127	181	283
43	53	62	84	92
121	151	242	143	186

This same simple rule applies also to fractional numbers, more especially to numbers where only one of the factors is fractional. Note the following examples, and in finding the product, say $6\frac{1}{2}$ times 7 are $45\frac{1}{2}$ and put down the whole product; then carry *one*, and say 5 times 8 are 40, giving the answer $4045\frac{1}{2}$.

87	93	42	65	49
$46\frac{1}{2}$	$48\frac{2}{3}$	$38\frac{1}{2}$	$37\frac{1}{2}$	$17\frac{3}{4}$
74	34	63	37	98
$38\frac{2}{7}$	$70\frac{2}{3}$	$38\frac{1}{2}$	$17\frac{2}{3}$	$37\frac{1}{3}$

The author does not claim that this application is practical, for the reason that the application of the rule cannot be seen at a glance. It shows, however, to what extent this very simple discovery can be carried. The rule applies also in quite large numbers. Note the following:

276	843	1127	2568
362	1126	1282	2243

Multiply 76 by 36.

36
76
2736

This is a modification of the same rule. Note that the left-hand figures add to ten and the right-hand figures are the same. The process is as follows:

$$6\times6=36$$
$$7\times3+6=27$$

Instead of carrying *one*, you carry one of the unit numbers (in this instance *six*), and add it, not to either of the *tens*, but to their product. Note the following examples:

26	25	24	23	22	21
86	85	84	83	82	81
27	28	29	31	32	33
87	88	89	71	72	73
34	35	36	37	38	39
74	75	76	77	78	79

41	42	43	44	45	46
61	62	63	64	65	66
47	48	49	51	52	53
67	68	69	51	52	53
54	55	56	57	58	59
54	55	56	57	58	59

The same rule applies to larger numbers. In the following examples add double the unit figure. Always add *double* when the sum of the tens 20; when 30, add three times the *unit* number, and so on.

126 6×6=36
86 8×12+(double 6)=108
10836

133	134	135	136	137
73	74	75	76	77
142	143	144	145	146
62	63	64	65	68
151	153	154	157	159
51	53	54	57	59
162	163	165	167	161
48	43	45	47	41
183	184	185	186	188
23	24	25	26	28

Multiply 32 by 52.

Here the left-hand figures add to 8, and the right-hand figures are the same. Instead of saying *twice two*, take the complements 8 and 8 and multiply them for the first two figures of the product. Find the remaining figures as in the last rule, only subtract *one* in every case from your

32 8×8=64
52 5×3+2—1=16
1664

result. Five times 3 plus 2 less 1 equals 16. Apply this modification to the following examples:

23	24	25	26	27	28
63	64	65	66	67	68
32	33	34	35	36	49
52	53	54	55	56	59
41	32	43	44	45	47
41	42	43	44	45	47
13	14	15	16	17	18
73	74	75	76	77	78

The same rule applies to larger numbers. When the sum of the ans is 18, add double one of the unit numbers; when 28, add three times the unit number, and so on. Note the following examples:

124	125	123	128	127
64	65	63	68	67
231	232	233	234	239
51	52	53	54	59
542	643	744	849	947
42	43	44	49	47

When the sum of the left-hand figures is 5 and the right-hand figures are alike, add one-half of the *like* number to the product of the left-hand numbers, as:

36 $6\times6=36$
26 $3\times2+(\frac{1}{2}\text{ of }6)=9$
936

If the right-hand numbers are odd, it will be impossible to take an even *half*. The difficulty can be overcome by making the half a *decimal* and adding it in. In this example, if it were 37 by 27, the product would be 999. Here we have 7 times 7 are 49, and 50 (the decimal of $3\frac{1}{2}$ or 3.50) makes 99. If the sum of the left-hand figures is 15, add *one and one-half* times the *equal* number; if the sum is 25, add *two and*

one-half times the *equal* number. Note the following examples, and apply this rule to each:

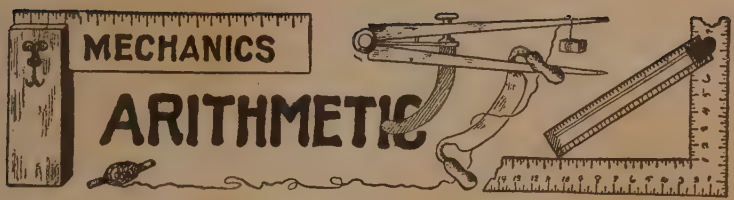
32	34	38	31	33	35
22	24	28	21	23	25
37	45	47	46	48	49
27	15	17	16	18	19
86	84	85	83	82	88
76	74	75	73	72	78
63	64	65	66	67	62
93	94	95	96	97	92

The same rule applies to numbers of more than two figures each. Note the following:

135	127	172	169	238
25	37	182	199	328

When the sum of the left-hand figures is 3, or 13, or 23, proceed as when 5, or 15, or 25, only deduct *one* from your left-hand total. That is, when you find the product of the left-hand numbers, deduct *one*, then add as before.

There are many other modifications, rules and exceptions. These, however, are the most practical and will be found of great benefit to all who give them study.



NOTES AND DEFINITIONS.

A **straight** line is a line which does not change in its direction.

Parallel lines are lines which always remain the same distance from each other, however far they may be produced.

The opening between two straight lines drawn from the same point is called an **angle.**

When two straight lines cross each other so as to form four equal angles, the angles are called **right angles.**

An angle greater than a right angle is called an **obtuse angle,** and an angle less than a right angle is called an **acute angle.**

A **surface** has length and breath without thickness. A *plane* surface is a *level* surface. The amount of space over which a surface extends is called its **area.**

A surface bounded by four straight lines, and having four right angles, is called a **rectangle.**

A *rectangle* is called a **square** when its four sides are equal.

The line joining two opposite corners of a square or rectangle is called the **diagonal.**

A plane figure bounded by three straight lines is a **triangle.** The **base** of a triangle is the side on which it is supposed to rest.

The **altitude** of a triangle is the perpendicular distance from the angle opposite the base to the base, or to the base produced.

A four-sided plane figure having no two sides parallel is called a **trapezium.**

The **perimeter** of a plane figure is the sum of its sides.

A **circle** is a plane figure bounded by a curved line, every point of which is equally distant from a point within, called the **center.** The boundary line is called the **circumference.** A straight line

drawn through the center and terminating at the circumference on both sides is called a **diameter.** A straight line drawn from the center to the circumference is called a **radius.**

A **solid** has length, breadth, and thickness, or height. A **cube** is a solid figure contained by six equal squares. A **rectangular solid** is a solid figure contained by six angular surfaces.

The **volume** of a rectangular solid is the portion of space which it occupies.

A solid bounded by a curved surface, every point of which is equally distant from a point within, called the center, is called a **globe, or sphere.**

A **cylinder** is a solid figure described by the revolution of a rectangle about one of its sides, which remains fixed. An uncut lead-pencil is an example.

Measurement Tables.

Linear measure is used in measuring lengths and distances. The table is as follows:

12 inches	=	1 foot . . .	*ft.*
3 feet	=	1 yard . . .	*yd.*
5½ yards (16½ feet)	=	1 rod . . .	*rd.*
320 rods	=	1 mile . . .	*mi.*

Remember that 1 mile equals 1,760 yards.

Surveyor's linear measure is used by surveyors in measuring land and distances. The table is as follows:

7.92 inches	=	1 link . . .	*l.*
25 links	=	1 rod . . .	*rd.*
100 links (4 rods) .	=	1 chain . . .	*ch.*
80 chains	=	1 mile . . .	*mi.*

Remember that a chain equals 66 feet or 4 rods.

Surface measure is used in measuring surfaces. The table is as follows:

144 square inches . .	=	1 square foot .	*sq. ft.*
9 square feet . .	=	1 square yard .	*sq. yd.*
30¼ square yards . .	=	1 square rod .	*sq. rd.*
160 square rods . .	=	1 acre . . .	*A.*
640 acres	=	1 square mile .	*sq. mi.*

A square measuring 208.71 + feet on each side contains 1 acre.

Surveyor's square measure is used by surveyors in computing the area of land. The table is as follows:

625 square links	=	1 square rod	*sq. rd.*
16 square rods	=	1 square chain	*sq. ch.*
10 square chains	=	1 acre	*A*

An acre equal 4,840 square yards.

Cubic Measure is used to measure the contents or volume of solids. The table is as follows:

1728 cubic inches	=	1 cubic foot	*cu. ft.*
27 cubic feet	=	1 cubic yard	*cu. yd.*
128 cubic feet	=	1 cord	*cd.*

Rectangular Planes.

The **area** of any rectangle is expressed by the product of the length and the breadth. Before multiplying it is necessary that both dimensions be expressed in units of the same denomination.

In the same manner, if a **rectangle** be 3 feet long and 3 feet broad, its area is 9 *square feet;* that is, the rectangle might be divided into 9 equal figures, each being a foot long and a foot broad.

Rectangular Solids.

The **volume** of a rectangular solid is expressed by the product of the length, breadth, and height, when the three dimensions are expressed in units of the same denomination.

To **measure** a solid block, or to find how much a box, a bin, or a cellar will contain, we have to ascertain, by actual measurement, its length, breath, and depth, and with these three dimensions find the volume by simple multiplication. Thus, if we desire to find the number of cubic yards of earth removed in digging a cellar 40 feet long, 18 feet wide, and 10 feet deep, we multiply 40, 18, and 10 together, and get 7,200 feet, or 266⅔ cubic yards.

Wood.

Wood cut in lengths of 4 feet is called **cord wood.** A pile of cord wood 4 feet high and 8 feet long, or equal bulk of other material, is called a **cord.**

Thus, a cord of wood is 8 feet by 4 feet by 4 feet, and contains 128 cubic feet. To find the number of cords in a pile of wood or bark piled in the form of a rectangular solid, find its solid contents or volume in cubic feet, and divide the result by 128.

Lumber.

Lumber, as the term is used here, includes all kinds of sawed boards, planks, scantlings, etc.

A **foot of lumber** is 1 foot long, 1 foot wide, and 1 inch thick, and is used as the unit of lumber measurement.

The term **scantling** is given to lumber 3 or 4 inches wide, and from 2 to 4 inches thick. **Joist** is usually narrow and deep. Lumber heavier than joist or scantling is called **timber.** Thick boards are called **planks.** The usual outside covering of wood houses is **siding.**

All lumber less than 1 inch in thickness is considered inch lumber in measuring.

In **measuring** the width of a board a fraction greater than a half-inch is called an inch, and if less than a half it is rejected. A board 5⅞ inches wide would be considered 6 inches wide.

The **price of lumber** is usually quoted at a certain rate per thousand feet.

A board 14 feet long, 12 inches wide and 1 inch in thickness would contain $(14\times12\times1)\div12$, or 14 feet. A board 10 feet long, 16 inches wide, and 3 inches thick, would contain $(10\times16\times3)\div12$, or 40 feet. Note that in measuring 12-foot lumber, 1 inch or less in thickness, the width of the board in inches is the number of feet it contains.

Stone-work.

A **cord of stone** is the same size as a cord of wood. In estimating stone-work no smaller part than quarter cords is allowed.

A cord of stone will make about 100 cubic feet of **wall.**

In **estimating the amount of stone** or the cost of the mason-work, it is customary to measure around the **outside** of the wall, and make no allowance for openings except they are large.

Three bushels of lime and a cubic yard of sand will lay a cord of stone.

A **perch** of stone-work is 1 rod long, 1½ feet thick, and 1 foot high: it contains 24¾ cubic feet. A fractional part of a perch is reckoned as a perch.

Brick-work.

Bricks vary so much in size and style that a **table of exact** dimensions is impracticable. Ordinary bricks are 8½ inches long, 4 inches wide, and 2½ inches high.

It is sufficiently accurate to reckon 20 bricks to the cubic foot **laid dry.**

In **half-brick** walls, such as are built in veneering wooden houses, each brick, with the mortar required to lay it, has an external surface of 3 inches by 9 inches, or a brick is required for each 27 inches of surface.

In estimating material, corners are measured once, and allowance is made for doors and windows. **In estimating labor,** the corners are measured twice; that is, the outside measurement is taken and usually one-half is deducted for openings.

Shingling.

Ordinary **shingles** have an average width of **4 inches,** and are generally laid 4 inches to the weather.

A **bunch of shingles** contains a quarter of a thousand. **It is 20** inches wide, and has 25 courses on each side.

Allowing for waste, 1,000, or a **square of shingles, will lay** 100 square feet, 4 inches to the weather.

Lathing.

A **bunch of laths** contains 50 laths. **Laths** are **4 feet long,** 1½ inches wide, and are laid three-eights of an inch apart.

Allowing for waste, contractors reckon that a bunch of **laths** will cover 3 square yards.

Lathing is estimated by **the square yard. Only one-half the surface** of openings is deducted.

Plastering.

Plastering is estimated **by the square yard. Only half the surface** of the openings is charged.

Painting.

Painting and **kalsomining** are estimated by the square yard.

Wall-paper.

Wall-paper is sold only by the roll, any part of a roll being counted as a whole one.

American paper is 18 inches wide, and has 24 feet in a single roll, and 48 feet in a double roll.

Paper-hangers measure the distance around the room in feet and deduct 3 feet for each door and window. The difference, divided by 1½, gives the number of strips.

The **exact cost** of papering a room can be ascertained only by **taking** account of the number of rolls actually used in doing the work.

Miscellaneous Rules.

1. To find the circumference of a circle multiply the diameter by 3.14159.

2. To find the diameter of a circle, divide the circumference by 3.14159.

3. When the three sides of a triangle are given, to find the area: From half the sum of the three sides subtract each side separately. Multiply the half-sum and the three remainders together, and extract the square root of the product.

4. To find the area of a circle, multiply the circumference by one-half the radius.

5. To find the surface of a sphere, multiply the circumference by the diameter.

6. To find the contents of a sphere, multiply the surface of the sphere by one-third of the radius.

7. To find the hypothenuse of a right-angled triangle, add the square of the base to the square of the perpendicular, and take the square root of the sum.

Drill Exercises for Home Students.

1. How many inches are there in 2½ rods?

2. How many inches are there in a chain?

3. How many links are there in 1,760 yards?

4. What is the cost of a cable 1,230 feet long at 95 cents per yard?

5. The hold of a vessel is 30 feet deep, and her topmast is 90 feet high. If she sinks in 16 fathoms of water, how much of her rigging will be visible?

6. What is the cost of 35 miles of telephone wire at 40 cents a pound, supposing a pound to stretch 20 feet?

7. Find the cost of 80 rods of barbed wire fencing of five wires, at 2 cents per yard.

8. What will it cost to survey 36 miles of railway at $1.12½ per chain?

9. Find the cost of carpeting a stairway of 24 steps, each 12 inches

wide, and having a rise of 8 inches, allowing 2 feet extra for the projection of the steps, the carpet costing $1.25 per yard.

10. How many telegraph poles placed 60 yards apart will be required in 75 miles?

11. How many square feet are there in a square chain?

12. Find the cost of 20 square rods of sodding at 3 cents per square foot.

13. What will 3,200 square rods of land cost at $1.25 per square chain?

14. Find the cost of waxing a floor 24 feet long by 12 feet 9 inches wide, at 75 cent per square yard?

15. How many yards of cotton 1¼ yards wide will it take to line 15 yards of cloth ¾ of a yard wide?

16. How many bricks, each 9 inches by 4½ inches, will be required to pave the floor of a basement 36 feet by 27½ feet?

17. How many cubic inches are there in a cube whose edge is 4 feet?

18. If a block of stone 5 inches long, 3 inches wide, and 2 inches high weighs 44 ounces, what will be the weight in pounds of a cubical block of the same kind of stone whose edge is 2½ feet?

19. What weight of water will a rectangular tank contain, the length being 8 feet, breadth 5½ feet, and depth 7 feet? A cubic foot of water weighs 62½ pounds.

20. How many cords of wood are there in a pile 16 feet long, 12 feet wide, and 6 feet high?

21. What is the value of a pile of wood 120 feet long, 16 feet wide, and 8 feet high, at $4.50 per cord?

22. What is the value of a pile of tan-bark 120 feet long, 36 feet wide, and 12 feet high, at $6.10 per cord?

23. A sleigh upon which four-foot wood is piled is 12 feet long. How high should the wood be piled to make 1½ cords?

24. What is the value of a township of land at the rate of $80 for each half-section?

25. How many acres are there in the right-angled triangle formed

by joining the opposite angles of a rectangular field 40 rods long and 25 rods wide?

26. From a lot 40 rods square I sold 40 square rods. What is the value of the remainder at $120 per acre?

27. How many feet of lumber are there in a board 12 feet long, 6 inches wide, and 1 inch thick?

28. Find the number of feet of lumber in a plank 16 feet long, 14 inches wide, and 2 inches thick.

29. How much inch lumber will lay a floor 16 feet by 20 feet?

30. How many feet of lumber in a stick of timber 16 feet long, and 9 inches square?

31. How many feet of lumber in 40 pieces of siding, each 12 feet long, 6 inches wide, and half an inch thick? All lumber less than 1 inch in thickness is considered inch lumber in measuring.

32. How much lumber is there in 40 two-by-four scantlings, each 12 feet long?

33. Find the cost of 1,274 feet of lumber at $18 per thousand.

34. Find the cost of 20 planks, each 16 feet long, 10 inches wide, and 2½ inches thick, at $15 per thousand.

35. Find the cost of the inch lumber in a tight board fence 40 rods long and 6 feet high, at $10 per thousand feet.

36. Find the cost of an inch-board sidewalk, 4 feet wide, around the outside of a garden 200 yards by 90 feet, at $12 per M.

37. A feeding floor, 40 feet long, is laid with 16-foot planks 2½ inches thick. Find the cost at $11 per thousand.

38. If two-by-four studs are used, and they are placed 16 inches apart, how many feet of lumber are there in the studding of a wall 20 feet long and 12 feet high?

39. If 4×5 rafters are used, and they are placed 30 inches apart, how many feet of lumber are there in the 20-foot rafters of a double-roof 40 feet long?

40. A pile of ordinary bricks is 8 feet 6 inches high, 14 feet long, and 15 feet wide. What is the pile worth at $12.50 a thousand?

POSTSCRIPT NOTES

NEW YORK POINTERS ON MARGIN TRADING.

Select an honest broker. There is no reason why bonds and shares should not be publicly dealt in and in large quantities, as well as dry goods, corn, or cotton. But, unfortunately, few stock dealers confine their transactions to ordinary legitimate business. The members of stock exchanges are divided into two classes—those who execute commissions for others, and those who deal on their own account. Among the latter are the boldest and sharpest speculators of the day. All stocks are not quoted. You will look in vain for the stocks of dozens of corporations whose securities are among the choicest investments. The reason is very evident. The largest profits (to the speculator) are most often made out of the most abominable rubbish. Profits are made upon fluctuations. To those who are anxious to try "stocks," we say go carefully. As a rule it is safer to *earn* money than to *make* it.

Let us suppose for illustration that you wish to speculate in wheat. You order your broker to buy, say 10,000 bushels. He asks for a cash deposit of 5 cents a bushel, or $500. You ask him not to buy until the price reaches a certain *limit*, and if the price does not drop to the figure you quote, you either change your limit or withdraw your order. Suppose he buys your wheat at 67⅜. He will charge you ⅛ cent per bushel, so that the wheat will actually cost you 67½ cents. If the market continues about the same you are not asked to put up any more margin. If the price should drop your broker will immediately call for more margin. That is to say, the margin in any case must be sufficient to protect him against loss. If the price advances you can sell out when you think it has reached its highest point. The broker will charge you the same commission for selling as for buying. If you order your trade closed out below the purchase price you will lose the difference between the buying and selling price upon each bushel including

the brokerage and also the interest at a nominal rate for the time which the broker carried the trade for you. The interest is charged upon the amount of money which the broker puts up. If you fail to respond to your broker's call for margins and the market declines to the point where your margins are exhausted, or nearly so, the broker will be compelled to close your trade out in order to save himself from the loss which would occur on a further decline. If your trade is closed out exactly at the exhaust price you lose all the margins you have put up. A deposit must be kept with your broker larger than the loss that would be shown by all your trades if they were closed at the market price. Failure to do this gives your broker, by the rules of the exchanges, the privilege of closing all your trades to prevent a loss. As a rule people wish to buy when the market is rising and are obliged to sell when the market is falling. In ordering your broker to buy, state that your order is "open" if you wish it to be considered good for more than one day. Note the following points:

Bank Clearings.

The total amount of checks on banks paid in a given day through the clearing house. This total indicates the volume of business done by the business community for the day. When business is active, clearings are large; when dull, clearings are small.

Bradstreets.

This commercial agency makes a weekly report on the world's finances and the movements of raw products. The speculator should be thoroughly familiar with such reports.

Cable Reports.

The Chicago Board of Trade receives daily advices as to the condition of foreign markets from London, Liverpool, Antwerp, Berlin, and Paris. These are publicly posted for general information. A great many daily private reports are received by commission houses from their foreign correspondents.

Call Prices.

See the chapter on *Securities*. Calls good until the close of the next regular session of the exchange are usually sold a $1 per thousand bushels of grain. Calls good for a week are often sold at $1.25 per thousand, and the call price is further from the market price than is

the case with daily calls. Calls on stocks vary in price according to the conditions.

Future Delivery.

Grain is stored in warehouses until needed for milling or shipment. When we speak of December wheat we mean wheat that is to be delivered to the buyer in December. The carrying charges include storage, interest, and insurance, so that wheat sold for May delivery would necessarily bring a higher price than wheat sold for December delivery. Carrying charges are in favor of the *short* seller. When sold for immediate delivery it is known as cash grain.

Commissions.

Stock commission is usually ⅛ per cent. or $1.25 for 10 shares. Wheat commission is ⅛ c. per bushel or $1.25 per 1,000 bushels. Pork commission is 2½ c. per bbl., or $6.25 for 250 barrels. Lard is charged at the rate of 2 c. per 100 lbs., or $21.25 for 250 tierces. A tierce is a cask of lard containing 340 pounds. Cotton commission is 2 points per 100 lbs. or 10 cents per bale. Most of the commission houses deal in *futures* for their customers.

Futures.

Buyers of cash grain protect themselves against possible loss by selling an agreed amount for future delivery in some general market, such as Chicago. Such contracts are called *futures* because they do not terminate until some designated month in the future. These transactions pass from hand to hand and may be turned over hundreds and thousands of times in an active market before maturity, and this is called *dealing in futures*. Nearly all speculative operations are in futures.

Seller's Option.

All future contracts are at the sellers' option to deliver the grain on any business day of the delivery month. Therefore the buyer must stand ready to take the grain on any day of the delivery month, or turn his contract over to someone else by selling out the first day of the delivery month.

Split Trading.

The name *split* is given to a transaction, one-half at one quotation and one-half at another. For instance, the quotation 53⅝–¾ means

that one-half of the quantity traded in was at 53⅝ and the other half at 53¾. This quotation is just half-way between the two prices. Only an even number of thousand bushels can be traded in in this way, such as 2,000, 4,000, 10,000, etc.

Good Delivery.

A Stock which exactly fulfills the conditions of sale and is delivered to the buyer in exact accordance with the rules of the stock exchange is known as "good delivery." If the shares offered are of an unacceptable issue, or the rules of the exchange are violated in any particular it is called "bad delivery" and the buyer can appeal to the Board.

Storage Rates.

Storage rates at Chicago are ¾ c. per bushel for the first ten days, and ¼ c. for each additional ten days or part thereof. This is what the elevator proprietors charge, but must not be construed to mean that this charge comes out of the country shipper. The rules of the Board of Trade provide that ¾ c. storage must go with the first purchase of grain, and this is accepted by the buyer, so that the country shipper has no storage to pay, providing he has his grain sold within the first five days after arrival, as the receipts must have five days to run free of additional storage—the first charge being for ten days. Should the country shipper prefer to have his grain held until the five days have elapsed, then he is charged ⅓ c. storage, but has the right to hold the grain ten days more, thus virtually having obtained fifteen days storage for his grain for ⅓ c. Each additional ten days will cost ⅓ c. more, and so on. The point which many country shippers have not understood, and frequently inquire about, is the first ¾ c. storage. If the grain is sold on arrival or within the first five days thereafter, the country merchant pays no storage. There are three names applied to these storage receipts. The *gilt edge* are under four days old and have seven days to run before the first storage payment of ¾ c. per bushel is exhausted. The *regular* are five days old. The *short receipts* are those the first limit of which is nearly exhausted. Shippers should know also that interest is charged on all advances made on property handled on the Chicago Board of Trade; also the approved rate of insurance.

HOW BIG CONCERNS KEEP THEIR BOOKS.

I have made a careful study of the bookkeeping methods in operation in several large concerns including the great retail store of John Wanamaker, Philadelphia. I find that the actual methods in use and the old time methods taught in the average business school are as widely different as are the new department stores of great cities and the general store of a country district. The tendency is along the line of labor saving devices. In Wanamaker's store, for instance, where there are perhaps six thousand clerks, every salesman has a pad of blank forms upon which original records are made. These forms are so printed and arranged that they can be used for almost any kind of an order. If the goods are delivered and paid for at once, part of the slip goes with the cash and finally to the audit department, while another part goes with the goods and is wrapped up in the parcel. If the goods are paid for, but to be delivered, one part of the slip will follow the goods to the shipping department, where the particulars are copied to the parcel clerk's book and checked off when the parcel is delivered next day, perhaps at a country house ten or fifteen miles out of town. If the goods are to be delivered C. O. D. the same slips are used, but the entire slip is sent to the C. O. D. department, where the proper record is made before the goods are wrapped for shipping. If the goods are to be charged the same slips are used, and records are made almost similar to those made for the C. O. D. sales. All these record slips are finally collected and checked off in the audit department. Entries are made in the sixty-five large credit ledgers directly from the credit slips, and from these ledgers accounts and statements are made out. The original slips are all filed by days and ledgers and names so that any particular slip of any old date can be looked up immediately when needed. This method refers simply to the sales department, and the record is the same no matter whether the sale is a spool of thread, a thousand dollar lamp, or the complete furnishings for a hundred thousand dollar house.

Such a thing as a journal is unknown in the best houses and only business college trained bookkeepers understand what is meant by the antiquated system called *journalizing*.

The object of bookkeeping in any establishment is primarily to know the proprietor's financial condition—what he owes, what he owns, what is due him. If goods are sold the record should show (1) that the goods are actually delivered, (2) that the correct charge is made

against the buyer, (3) that he receives proper credit when the account is paid. Modern bookkeeping is trying to reach these ends in the shortest possible way and with the least expenditure of time and labor.

The Preparation of Accounts for the Court.

The first thing an administrator has to do is to file an inventory which should include the personal assets of the decedent. A life insurance policy, for instance, in favor of a man's wife should not be included in his estate; the proceeds belong to the wife exclusive of all creditors. Rents should not be introduced into the administrator's inventory. Although rents, when collected, are personal estate, yet if a man dies intestate, and there are rents due him uncollected they go to his heirs. An executor differs from an administrator in that he derives his power from the will. The administrator has his authority from the law, which appoints him, the decedent having died intestate; the executor has his authority from the will, which has made him executor. An executor does not usually have to give security; such is not the case with an administrator. The function of an administrator is to collect and distribute; the function of a trustee is to hold. It isn't a good plan to make any distribution before the court orders you to do so. If you do pay, you should secure yourself by taking refunding bonds. If you should pay a creditor in full and the estate fails to produce enough to pay all in full, you are liable to the other creditors for the amount paid over and above his pro rata share. You must remember also that the widow is entitled to her exemption of $300. or whatever the law grants, in advance even of the undertaker or of the doctor. The children are entitled to an exemption, in the absence of a widow, whether they are minors or not, if they are dependent.

It is much more important to learn the principles that govern correct systems of bookkeeping, than it is to learn any particular form according to which books should be laid out. An intelligent young business man may learn bookkeeping by acquiring the fundamental principles of scientific accounting, and draw up his own forms in accordance with those principles. For this reason, a knowledge of the principles and methods that are used by the best bookkeepers in any business will enable any one to vary the forms so as to apply them to any other business. In general, those forms are best which (1) require the least copying, (2) the fewest entries, (3) the least ruling; (4) which require the books of original entry to be posted directly to the ledger, and (5) in which the journalizing is done by means of ruled columns. (6) The best forms also should facilitate, as much as possible, taking balances and ascertaining losses and gains. If the intelligent bookkeeper criticises his forms on these six lines and finds them satisfactory, while they show all the results that the proprietors wish to ascertain, he may be satisfied with his work. The following special points are worth noting:

Renewed Notes.

When a note is renewed the best way to record it is simply to make the memorandum in the bill-book, marking out the old and entering the new. If something is paid on the note, a journal memorandum may be made, or if the note has been discounted by us, and we are obliged to take it up, the complete entries had best be made.

Branch Houses.

The books of branch houses should be kept the same as though the branch were independent, excepting that the parent house is credited with the net investment. When closing the books debit or credit the parent house with the net loss or the net gain. Daily reports should be required.

Trial Balance Errors.

If the difference is in round numbers, as $100 or $10,000, the error is likely one of addition. If the difference is divided by 9, the error may be caused by the transposition of figures, as 72 for 27. If the difference is divided by 2, the error may have arisen from posting an item representing just one-half the difference to the wrong side.

Change of Bookkeepers.

In taking a set of books from another bookkeeper, begin by taking a trial balance to ascertain whether or not the books balance. They must balance before you can proceed.

C. O. D. Sales.

When we ship goods C. O. D., or ship them and draw at sight as soon as they are shipped, we charge the person to whom shipped in a special C. O. D. book, and credit him when the money is received.

Price Book.

The wholesale dealer uses a price-book in about the same way that a manufacturer would use a cost-book. The illustration given in this chapter is taken from a book in use by a wholesale hardware merchant. The book should be alphabetically indexed and the articles entered alphabetically. Pocket size price-books are manufactured for the use of salesmen. In these the cost and selling prices are expressed in letters or other marks.

Customers' Accounts.

The new form of retail ledger shown on page 315 is being used quite generally by some western houses. It has some advantages. The space at the right gives opportunity for entering records of the customer's credit. Under the *folio* heading is entered the page or number of other records giving the particulars of the debit or credit. The account can be kept in compact form and is easily checked off.

Merchandise Stock Register.

Many large concerns keep a stock register for each department. Such a register will show the daily condition of the stock. Note the illustration given on page 322. A similar register is kept by large furniture dealers showing at the end of each day the exact number of pieces of each particular kind of furniture remaining on hand.

Purchase Journals.

For manufacturing concerns (page 313) contain special columns for the various kinds of raw material used in the factory, and for the principal sources of outlay or expense in conducting the business. The number of columns will depend largely upon the character of the business.

Wanamaker Credit Ledger.

The style of credit ledger in use in one of the largest department stores in the country is shown on page 321. Notice that there are two columns for the items to be charged and one column for the credits. The complete items are entered and the bills are made out directly from the ledgers.

Daily Cash Balance Book.

In a large concern it is not convenient to balance the cash in the cash book and a special book is necessary. The form on page 324 shows the ruling of a cash balance book in use in a Philadelphia house. The gross cash items are brought from other books, including the bank book and check book, and are entered in this book at the close of each day.

Instalment Accounts.

Within a few years a very large number of concerns have engaged in what is known as "selling on instalments." The property apparently sold, whether it be worth $1.00 or $1000.00, is simply leased, with the understanding that the weekly or monthly payments of rent are to credited upon the general purchase price until the entire amount has been met. An illustration of an instalment register is given on page 323. The other books necessary will depend largely upon the general character of the business.

Law Ledger.

A new form of ledger for lawyers is shown on page 317. It will be readily understood by any person familiar with law accounts. A similar form of ledger could be used by a small manufacturer. The column heading "docket" could be used for particulars of the order and the cost of material.

Mail Order Register.

See page 320. No explanation is necessary. There are thousands

of concerns doing a successful mail-order business and many large retail houses find this department of their trade very profitable.

Horizontal Sales Ledger.

See page 318. For some kinds of business, particularly small jobbers, this form of ledger is considered specially desirable. If continued across the double-page so as to represent a whole year, the entire condition of any account could be seen at a glance.

Pay Roll.

Note the pay-roll form on page 314. The particular advantage comes from the *change* columns. In these columns are entered the bills or silver necessary to pay each. Suppose the amount due to be $22.47. Now, to pay this amount, we need *two* $10 bills, *one* $2 bill, *one* 25-cent piece, *two* 10-cent pieces, and *two* 1-cent pieces. Write *2* in the $10 column, *1* in the $2 column, *1* in the 25-cent column, *2* in the 10-cent column, and *2* in the 1-cent column. Remember always to take the largest bills or coins possible. The check for wages should be written "Pay to the order of *Pay Roll*" and a memo. of the actual change needed should be pinned to it or written on the back. If when all the pay envelopes are filled the cash is over or short an error has been made, and some person is receiving either too little or too much.

Stepladder Balance Sheets.

When you see a bookkeeper making out an old fashioned step-ladder balance sheet, one of these things laid out like the maps of three new prairie towns printed on top of each other, put him down for a back number. A form of balance sheet is shown on page 316. It is complete enough for a railway or a city and is simple enough to be understood by every person having occasion to look at it.

Municipal Accounts.

The books necessary and the methods to be used in keeping the accounts of a city or municipality do not differ except in detail from the books and accounts of other corporations.

General Information.

The value of the goods can be known only by accurate count and estimation, and must be clearly stated both at the beginning and at the end of a term of business. An inventory should be taken yearly.

This should show the goods on hand at the beginning of the year, the goods bought during the year, and the goods remaining on hand. The **balance sheet** should show the resources and liabilities both at the beginning and at the end of the year. It should really be an abridged history of the business. Every business man should know exactly what his **profits and losses** have been. Wrong estimates are ruinous, and it is better to see the truth than to continue an enterprise on a mistaken basis.

You should keep a **stock** or **capital account** in your ledger. This should show the original capital which you invested, and the yearly additions. This account may be opened under your own name. Credit it with the cash and other resources invested and debit it with you liabilities. Debit this account with the sum total of the moneys or goods which you draw for the business for your **private use.** The **net loss** is also debited to it, and the **net gain** credited.

Although the merchant's account-books are his private records, they also partake of the nature of a trust, and should bear internal evidence of being **kept honestly and in good faith.** They should be competent to bear the scrutiny of creditors, if it become expedient or necessary. If **errors** are made, they should be so corrected as to show the original error, and the reason for its correction. Account-books should be so plain and clear as to be understood at once by a stranger who sees them for the first time, and explicit and ample enough for the guidance of an executor or administrator, in case of the merchant's death.

The particular form that one chooses for recording his business transactions is a matter of much importance. The record should be full, yet brief as possible; every transaction should be so recorded that its essential facts can be found easily; the form should be adopted to the business. Don't make blind entries that only yourself will understand. Be neat and orderly. Get into a habit of doing things right. Don't let small matters "stand over." Promptness is essential to success.

PAGE FROM PURCHASE JOURNAL.

Date		Credit	F.	Amount	Mdse.	Delivery	Furniture	Power

PAY ROLL. For the Week Ending ..... 189 .....

NO.	NAME	Time in Hours						Total Time	Rate per Hour	Amount Advanced	Amount Due	Bills and Silver Necessary									REMARKS
		M	T	W	T	F	S					10	5	2	1	50	25	10	5	1	

CUSTOMERS' ACCOUNTS.

FILE No. _____ TERMS _____

Name _____

Address _____

Bank _____

REMARKS

Date	Charge	F	Dept.	Date	Credit	Cash or Note

CUSTOMERS' ACCOUNTS.

THE BEST FORM OF BALANCE SHEET.

Net Investment			4200	
Net Gain			2954	18
Resources:				
Cash on Hand	2000			
Merchandise	9420			
Accounts Receivable	3682	40		
Bills Receivable	1024	75		
Real Estate	3692	45		
Furniture	212	18		
Stocks and Bonds	1000			
Liabilities:				
Accounts Payable			5260	20
Bills Payable			6372	10
Mortgage Payable			2000	
Other Liabilities			245	25
	21031	73	21031	73

LAW LEDGER.

DATE	DOCKET	DATE	CHARGES	AMT.	DATE	CREDITS	AMT
Nov. 1	Suit to be brought against R. Brown on protested note for $5 00. No. 2468.	Nov. 5	Cost of Petition for No. 2568.	7 50	Nov. 1	Deposit	25 00

LAW LEDGER.

HORIZONTAL SALES LEDGER.

1896	JANUARY								FEBRUARY						MARCH		
CUSTOMER	DAY	F	DEBITS		DAY	F	CREDITS		DAY	F	DEBITS	DAY	F	CREDITS	DAY	F	DEBITS
James Brown	3	13	21	30	5	96	8	10									
15 State Street	4	27	63	90	20	109	50										
Buffalo, N. Y.	7	36	7	25													
	15	104	18	40													
	20	140	37	20													
	21	152	8	60													

HORIZONTAL SALES LEDGER.

PRICE BOOK.

GOODS				COST				SELLING PRICE		
ARTICLES	KIND	BROUGHT FROM	DATE	LIST	DISCOUNT	NET	ADD	WHOLESALE	RETAIL	SPECIAL
Augers	½ in.	Browne Mfg. Co.	Jan. 10	5 50	50.20	2 20	10%	35 off	40	10 off

MAIL ORDER REGISTER.

DATE	NO.	AMOUNT	ARTICLE	ADV.	NAME	ADDRESS	SHIPPING RECORD	
Oct. 3	2046	3 20	Books	Y. C.	M Brown	Alexander, Va.	25	Mail

Name..... Address.....

DATE	CHARGE	AMT.	DATE	CHARGE	AMT.	DATE	CREDIT	AMT.

MERCHANDISE STOCK REGISTER.

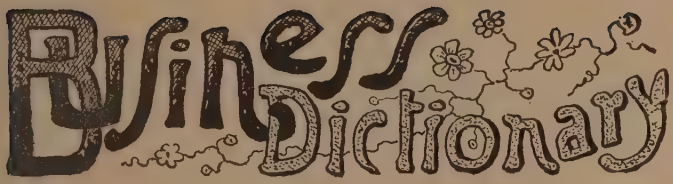
DATE	BOUGHT FROM OR SOLD TO	TEA			COFFEE			RICE		
		Number of Pounds			Number of Pounds			Number of Pounds		
		Bought	Sold	On hand	Bought	Sold	On hand	Bought	Sold	On hand

INSTALMENT REGISTER.

RECORD OF LEASE							RECORD OF PAYMENTS					
		LESSOR		ARTICLE		TERMS	AUGUST			SEPTEMBER		
No.	DATE	NAME	ADDRESS	STYLE	PRICE		DATE	PAID	BALANCE	DATE	PAID	BALANCE
25	Aug. 5	J. B. Smith	16 Queen St.	No. 35	60 00	$6 per mo.	Aug. 5	6	54	Sept. 10.	6	48

DAILY CASH BALANCE BOOK.

DATE	ACCOUNT	PARTICULARS	F.	B. RAIL. & DIS.	CASH SALES	RECD ON ACCT.	PAID



Commercial Terms Defined.

Abatement.—A discount allowed for the prompt payment of a debt, for damage, for overcharge, or for any similar reason; a rebate.

Above Par.—Stocks which sell for more than their face value are said to be *above par*.

Accept.—To acknowledge by signature; to accept a Draft is to acknowledge the obligation to pay it when due.

Acceptance.—The formal agreement, by signature, by a Drawee to pay a Draft according to its terms; usually made by the Drawee writing the word "Accepted" across the face of the Draft, signing his name thereto, and indicating its date. Acceptances are of three principal kinds: *general* or *unqualified*, when no qualifying words are added; *special*, when expressed as payable at some particular bank; and *qualified*, when expressed to be for a less sum than that for which the Draft was originally drawn, or when some variation in the time or mode of payment is introduced; an accepted Draft.

Acceptance "supra-protest," or for honor. An acceptance by some third party after protest for non-acceptance by the Drawee, with the view of saving the honor of the Drawer or of some particular indorser.

Acceptor.—The party who accepts a Draft so as to bind himself to pay the sum specified in it.

Accommodation Paper.—Notes or acceptances drawn without a consideration for the purpose of raising money. Such notes are sometimes changed for mutual accommodation.

Amount Current.—An open account. A detailed statement of an open or running account showing its condition at the time when made.

Amount Sales.—An itemized statement of sales and charges sent by a commission merchant to the consignor.

Accrue.—To accumulate as profits or losses.

Accrued Interest.—Interest accrued or earned to the current time, as on Bonds or time interest-bearing Notes, but not due and payable until a specified future date.

Acknowledge.—To admit; to certify by signature to the genuineness of a deed or mortgage; to give information of the arrival of a letter or remittance.

Actuary.—A registrar; a clerk; a person skilled in the application of the doctrine of chances to financial affairs, more especially to insuring of lives; the managing officer of an insurance company or corporation

Adjust.—To put in order; to bring to a satisfactory state, so that parties can agree in the result.

Ad Valorem.—According to value; applied to duties, etc.; levied according to value, and not by weight or measure.

Adventure.—A speculation of any kind, commercial, financial, or mining; a venture, specifically a speculation in goods sent abroad, or sent to be sold on commission.

Advice.—Mercantile information; formal official notice, as by letter or telegram.

Affidavit.—A written declaration under oath, sworn to before some person who has authority to administer oaths.

Afloat.—Merchandise arrived in port, but not delivered from vessel.

Agent.—A party acting on behalf of another, called his principal; one commissioned to do business for another; a factor; an attorney.

Allonge.—A slip of paper attached to a Note, Draft, or other negotiable paper, to receive indorsements when the back of the paper will hold no more.

Amount.—The sum total; the aggregate. Gross amount is the total without deduction. Net amount is the total less deduction.

Annuity.—A periodical payment of money, amounting to a fixed sum in each year, the moneys so paid being either a gift or in consideration of a gross sum received.

Antedate.—To date earlier than the real time; to date beforehand, as a Note or other document.

Appraise.—To value in current money; officially set a price upon.

Appraisement.—The act of setting a value upon goods or other property.

Arbitraging.—Operating in the same stock or product in two different markets to make a profit out of the difference in price or "spread" between them, as, for instance, buying wheat in St. Paul and selling it in Chicago.

Arbitration.—The investigation and determination of a cause or matter in controversy by an unofficial person, or by persons mutually chosen by the contending parties.

Assessment.—A call upon the holders of stock or policies to pay into the treasury a certain sum in order to pay off debts or affect a reorganization.

Assets.—Any goods or property or right of action properly available for the payment of a bankrupt's or a deceased person's obligations or debts. Assets are real or personal. Real assets are lands such as descend to the heir; personal assets are the money or goods of the deceased or insolvent, or debts due to him which come into the hands of the executor or administrator, or which he is to collect or convert into money. Property or effects in general belonging to a merchant or trader; all that one owns considered as applicable to the payment of his debts. Property belonging to, and debts due to, the Concern.

Assign.—To transfer or make over to another the right one has in any object, as in an estate, especially in trust for the security of creditors.

Assignee.—The person who adjusts the affairs of an insolvent debtor.

Assignment.—The writing by which an interest is transferred; property assigned; a transfer by a debtor of all his property and effects to one or more assignees for the benefit of his creditors.

Association.—An organized union of persons for a common purpose; a partnership.

Assume.—To take upon oneself; to promise to pay money or perform other specified service.

Atlantic Ports.—The four principal export points on the Atlantic coast are Boston, New York, Philadelphia, and Baltimore.

Attach.—To take by legal authority.

Attachment.—A seizure of goods by legal process; the writ or process directing the person or the estate of a person to be taken.

Audit.—To examine and verify accounts by checking items with corresponding vouchers.

Auditor.—A person appointed to examine and verify the accounts of a firm or society.

Average.—Any medial amount, estimate, or general statement, based on a comparison of a number of diverse specific cases; a fair sample; a medium time for the payment in *one* sum of several sums due at different times.

Averaging Out.—Increasing your investment when the stock or produce market is going against you, so that your total line may average out with a profit sooner.

Balance.—The arithmetical difference between the two sides of an account; the sum necessary to make the two sides of an account equal in amount, spoken of as a debit or credit balance; (verb) to bring into a state of equality; to settle by paying what remains due on an account.

Balance of Trade.—The difference in value between our exports and our imports.

Bale.—In speculative dealings a bale of cotton is understood to mean 500 pounds and of hops 180 pounds. When either commodity is sold for consumption the actual or net weight of each bale is ascertained and charged for.

Bank.—An establishment for the custody and issue of money; the office in which the transactions of a banking association are conducted.

Bankable.—Receivable as cash by a bank, such as checks, express orders, money orders, etc.

Bank Bill.—A note of a bank payable on demand, and used as currency; a bank note.

Bank Book.—The book kept by a depositor, in which the receiving teller writes the separate deposits, and the bookkeeper of the bank enters the paid checks.

Bank Clearing.—The aggregate amount of the checks and drafts exchanged between banks (members of clearing-house association). In large cities less than ten per cent. of the commercial business is done with currency. While the clearings do not represent the sum total of the counter transactions of banks for any given time, they form a good basis for calculation as to the comparative volume of trade from week to week. They really indicate the growth or shrinkage of trade.

Bank Note.—A promissory note, payable on demand, made and issued by a bank authorized by law, and intended to circulate as money: called also a bank bill in the United States.

Bankrupt.—The breaking up of a concern's business due to its inability to meet its obligations; an insolvent person whose property is administered for, and distributed among his creditors in accordance with law; a hopelessly insolvent person; one notoriously unable to pay his debts; in the state of one who is insolvent, that is, unable to pay his debts.

Bankruptcy.—The state of being bankrupt or insolvent.

Barrel.—The standard or commercial barrel of pork is always reckoned at 200 pounds. It contains only 190 pounds of fresh or green meat and the addition of brine usually brings the weight up to 220 to 225 pounds. In a barrel of flour there are 196 pounds, of salt and resin 280 pounds, and of cured fish 200 pounds. The number of gallons in a barrel of molasses, syrup, oils, turpentine, wines, liquors, vinegar, and in fact all liquids, varies from forty to fifty gallons. When sold they are generally gauged and the actual contents specified in billing. The same is true of hogsheads, pipes, puncheons, tierces and kegs.

Barter.—To traffic or trade by exchanging one commodity for another in distinction from buying or selling for money.

Bear.—A person whose interest it is to secure lower prices; a "short seller" for a decline. (See Short.)

Bill.—A written statement of the names, quantities, and prices of articles sold by one person to another, with the date of sale, or a statement of work done, with the amount charged; an amount of money claimed for goods shipped or services rendered.

Billhead.—A printed form used by a concern for its bills of goods sold.

Bill of Entry.—A written statement of goods entered at the custom-house, whether imported or intended for export.

Bill of Exchange.—A general term for Foreign or Domestic Drafts, more especially the former. A Foreign Bill of Exchange, that is, one drawn between two cities in different countries, as Boston and London, is usually drawn in a Set of three, any one of which being paid the other two are void. A Domestic or Inland Bill is drawn between two sections of the same country, as Boston and Chicago, and is usually

drawn in "Original" and "Duplicate," either paid the other is void. Bills are drawn by a Bank or Banker upon another Bank or Banker.

Bill of Lading.—A negotiable receipt for goods delivered to a transportation company for carriage.

Bill of Parcels.—A written statement given by the seller to the buyer, containing particulars of the goods bought and their prices.

Bill of Sale.—A formal instrument for the conveyance or transfer of personal chattels, as household furniture, stock in a shop, or the like.

Block.—A number of shares, say 5,000 or 10,000, massed together and sold or bought in a lump.

Board of Trade.—A voluntary association of business men for the regulation and advancement of commercial interests.

Boat Loads.—Refers to canal boats and not to ocean vessels. Erie canal boats average 8,000 bushels grain capacity; hence the announcement that "ten boat loads of grain were taken for export" is equivalent to saying that 80,000 bushels were taken. The lading or freight of a sea-going vessel is called a cargo.

Bona-fide.—In or with good faith; frequently used as an adjective in a compound word in sense of genuine or honest.

Bond.—An instrument under seal, by which the maker binds himself, and usually his heirs, executors, and administrators, to do or not to do a specified act. A certificate of ownership of a specified portion of a capital debt due by a government, a city, a railroad, or other corporation, to individual holders, and usually bearing a fixed rate of interest.

Bonded Goods.—Imported goods left in a bonded warehouse until the duties are paid.

Bonded Warehouse.—A government warehouse in which bonded goods are stored until the duties thereon are paid.

Bonus.—A premium on a loan; something extra or in addition

Boom.—A rush of business. A quick inflation of values.

Bottomry Bond.—A mortgage or lien upon a vessel to secure the repayment of money advanced to its master.

Bradstreet's.—The weekly report made by this Commercial Agency, usually on Tuesday, on the world's visible supply of wheat, showing the changes in public and private storehouses west of the Rocky Mountains

in America (which are not counted in the visible supply) east of the Rocky Mountains in America, and in and afloat for Europe.

Brand.—A trade mark; a particular kind of goods.

Break.—A quick small decline.

Broker.—A middleman or agent who, for a commission or rate per cent. on the value of the transaction, negotiates for others the purchase or sale of stocks, bonds, commodities, or property of any kind, or who attends to the doing of something for another. One who loans money on pledges.

Brokerage.—The business of buying or selling property for others; also, the fee and commission charged for transacting such business.

Bucket Shop.—A place where bets are made on quotations of prices established on legitimate Exchanges and Boards of Trade. Pretended trading. Illegal in most States.

Bulge.—A quick, small advance.

Bull.—A person whose interest it is to secure higher prices; a buyer for an advance.

Bulling.—Raising the price of stocks, etc.

Bullion.—Uncoined gold or silver.

Bushel.—The number of pounds in a bushel of the various articles of commerce is fixed by law in the different States. Although not uniform, it is nearly so. In Illinois a legal bushel of anthracite coal or quicklime contains 80 pounds; corn in the ear, 70; wheat, white beans, potatoes, dried peas and clover seed, 60; onions, 57; shelled corn, rye and flax seed, 56; fine salt, sweet potatoes, turnips, parsnips and carrots, 55; buckwheat, 52; millet seed, coarse salt and hickory nuts, 50; barley, cornmeal and Hungarian seed, 48; hemp seed, 44; coke and fine middlings, 40; barley malt, 34; cranberries, 33; oats and onion sets, 32; coarse middlings, 30; dried apples, 24; unpared dried peaches, 23; charcoal, 22; bran, 20, and bluegrass, redtop and orchard grass seed, 14 pounds.

Buyer Three.—A Wall street expression signifying that the buyer has three days in which to pay for his purchase.

By-bidder.—One who bids at an auction in behalf of the owner for the purpose of running up the price of articles.

Cables.—Cablegrams quoting foreign markets. Public cables are those received daily by the Chicago Board of Trade from London,

Liverpool, Antwerp, Berlin and Paris and publicly posted for general information.

Call.—A privilege to buy at a certain time for an agreed price, called the "call price," which is always a little above market price. (See Privileges.)

Call Clerk.—One who calls off the goods to be charged.

Call Loans.—Money loaned subject to the call or demand of lender. It must be returned the day it is called for before the close of banking hours.

Capital.—Money or other property invested in business.

Car Lots.—The number of cars of various grains received and inspected at Chicago, or other markets, daily.

Carrying Stock.—To hold stock with the expectation of selling it at an advance.

Carrying Charges.—Storage, interest and insurance on grain are called carrying charges, and are represented by the excess of the price for future delivery over the cash price of any commodity. For instance, if May wheat is 4 cents higher than cash wheat this 4 cents represents the cost of carrying, warehousing and insuring the wheat from now till May. Carrying charges are in favor of the short seller. Those who sell for May delivery get a price about 4 cents higher than if sold for December delivery. If the cash market declines 1 cent by May the short seller makes 5 cents profit; if it stands still he makes 4 cents; if it advances 3 cents he still makes 1 cent profit.

Cash Grain.—Grain for immediate delivery or for delivery during the current month.

Cashier.—The clerk who has charge of the Cash; the second executive officer in a bank.

Central.—A hundred weight or 100 lbs. avoirdupois.

Centime.—A French and Belgian monetary unit, being the one-hundredth part of a franc; it takes about 5 centimes to equal 1 cent of our currency. Quotations at Paris and Antwerp are given in centimes.

Certificate.—A written voucher attesting a fact.

Certified Check.—A check to which the cashier of a bank certifies in writing as to the genuineness of the signature of the drawer, and that he has funds on deposit sufficient to meet it, the bank reserving the amount certified, and regarding it as having been already paid, and therefore unavailable for other use.

'Change.—An abbreviation for Exchange.

Charge.—To register a debt; to place upon the Dr. side of an account. That which constitutes a debt in commercial transactions; the sum paid as the price of anything bought or any service rendered. An entry upon the Dr. side of an account.

Charter.—An engagement to lease a vessel for a voyage at a fixed rate of freight per bu. or per 100 lbs.

Charter Party.—A written agreement by which a shipowner lets a vessel to another, usually for the conveyance of a cargo, either retaining control of the vessel or surrendering it to the charterer.

Chattel Mortgage.—A mortgage of personal property.

Chattels.—Movable property; not Real Estate.

C. I. F.—Charges, insurance and freight paid or included.

Cipher Code.—An arrangement of words to stand for phrases, numbers or quotations, so that telegrams may be thus sent in a private and condensed form.

Clear.—To exchange checks and bills, and to settle balances as is done in a clearing house.

Clearance.—A certificate issued from a Customhouse granting a vessel permission to sail.

Clearing House.—An organization for the settlement of balances between members. Usually applied to banks.

Clearing House Certificates.—Certificates issued by a Clearing House against collateral approved by the loan committee, and used in the settlement of the daily balances between its members.

Clique.—A combination of persons "to run a deal" or manipulate a market. Usually applied to stocks, grain and provisions.

Coalers.—Coal roads. A term usually employed on stock exchanges to describe the Reading, Lackawanna, Delaware & Hudson and Jersey Central Railroads.

Cocket.—A Custom House warrant to show that goods have been entered.

Coin.—Gold or silver money.

Collaterals.—Stocks, Bonds, Notes, or other value, given in pledge as security when money is borrowed.

Collateral Security.—Security for the payment of money or the performance of covenants in addition to a principal promise or bond,

e. g., a warehouse receipt or a paid-up insurance policy given as security for the payment of a promissory note would be collateral.

Combine.—A word expressing the same meaning as "trust" and supposed not to be quite so distasteful to the opponents of monopolies.

Commerce.—Interchange of goods, merchandise, or property of any kind; trade; traffic, especially of trade, on a large scale, carried on by transportation of merchandise between different countries or different parts of the same country.

Commercial Paper.—Negotiable paper, such as drafts, bills of exchange, etc., given in the due course of business.

Commission.—An allowance or percentage for selling the goods of another, or for transacting any business for another.

Commissions.—The following table shows the usual rates of commission charged for a complete deal, made and closed:

Wheat, corn and oats.....⅛ per bu., or $1.25 per 1,000 bu.
Stocks.....⅛ of 1 per cent. per share, or $1.25 for 10 shares.
Pork.....2½c. per bbl., or $6.25 for 250 bbls.
Lard and ribs..2½c. per 100 lbs., being $21.25 for 250 tierces.
Cotton.....2 points per 100 lbs., being 10c. per bale.

Common Law.—Law based upon the precedent of usage, and not contained in the Statutes enacted by legislative bodies.

Common Stock.—The ordinary shares in a corporation. (See Preferred Stock.)

Compromise.—An agreement embracing mutual concessions.

Concern.—The business itself considered as a person independent of its ownership.

Consign.—To send goods or property to an agent or broker. The sender of the goods is a consignor; the receiver is a consignee, and the goods or things sent are a consignment.

Consols.—A contraction of "consolidated." It represents the consolidation of Great Britain's bonded debt, and is the leading English funded government security.

Contango.—(London Stock Exchange.) A rate paid for carrying shares over until next settlement day. When a broker desires to "continue shares" or to postpone the day of payment or delivery, the premium paid is called in the seller's case "backwardation" and in the buyer's case "contango."

Continental Markets.—The Paris, Berlin and Antwerp markets.

Contra.—On the opposite side.

Contract Grade.—That grade of grain which it is necessary to deliver in order to fill future contracts. In Chicago this is No. 2 wheat, corn, oats, etc.

Conversion.—Bonds are frequently issued with a provision whereby they can at any moment be exchanged for equivalent stock. Such securities are called "convertible," and the act of substitution is called "conversion."

Copartnership.—A union of two or more persons for business purposes.

Corner.—An artificial scarcity created by holding property off the market for the extortion of abnormally high prices. Where the purchases of any party or parties exceed the amount of contract grain in regular warehouses on the last delivery day of the month for which such purchases have been made, the grain so bought is said to be cornered.

Corporation.—A corporate body authorized by law to act as a single individual.

Counter Entry.—An entry made to balance one on the opposite side.

Countermand.—To revoke a former order.

Coupon.—One of the certificates of interest attached to a transferable Bond; a coupon should be cut off and presented for payment when due, usually semi-annually or annually.

Coupon Bonds.—Bonds payable to bearer without any registration of the owner's name anywhere. The interest on these bonds is evidenced by coupons which, when they become due, are cut off the original bond and collected.

Cover.—The buying in of grain or stocks to fill short contracts is called "covering."

Covering Shorts.—Buying in property to fill contracts (usually for future delivery) previously made.

Credit.—1. An amount due from the Concern; a Liability.

2. To place to the credit side of an account.

3. To sell goods without receiving immediate payment, called selling on credit.

4. Pecuniary integrity.

Creditor.—1. A party to whom a debt is owed.

2. A party from whom value is received without giving anything in return therefor at the time of its reception.

Cross Trade.—Under Board of Trade rules it is not considered legitimate for a commission house to fill orders for customers by buying or selling to itself. It often happens, however, that a house receives orders from different parties—one to buy and the other to sell, at the same price an equal amount of property. In a wild market it might be impossible to execute both orders when the limits were reached. To provide against such a contingency, to insure the filling of both orders, and at the same time to legalize the transactions, it is customary for the broker to make a nominal purchase and sale through another commission house. The transactions are known as "cross trades" and are entered on the trading cards of the two brokers as distinct trades.

Curb.—Prices made by private transactions not in trading hours are called curb markets.

Curbstone Market.—A hanger on of Board of Trade or Stock Exchanges who does business on the sidewalk. An irregular speculator with the street for his place of business and for his office his hat.

Currency.—That which passes as money, viz, paper, the generic name for the money of a country.

Current Funds.—That which passes as money at its face value.

Current Price.—Ordinary price at time referred to.

Custom House.—A government place where imported goods are entered and duties collected.

Debenture.—A Custom House certificate, entitling the exporter of imported goods to a drawback of duties paid on their importation. A writing acknowledging a debt; a writing or certificate signed by a public officer or corporation as evidence of debt, peculiarly an instrument, generally under seal, for the repayment of money lent; a certificate of mortgage or loan on railway or other public works. (In custom) A certificate of drawback; a writing which states that the importer is entitled to a certain sum from the government on the reëxportation of specified goods, the duties on which have been paid.

Debenture Bonds.—Concentration of floating capitalization into convenient bonded form. Originally, notes in the form of bonds.

Debentured Goods.—Goods on which a debenture has been given as being entitled to a drawback.

Debit.—1. An amount due to the Concern; an Asset.

2. To place to the debit side of an account.

3. A recorded item of debt.

Debt.—An amount owed by one party to another.

Debtor.—A party who owes a debt; one who owes another money, goods, or services.

Default.—The failure to pay fixed charges or interest coupons. This is a serious thing for a corporation and usually causes a heavy shrinkage in value.

Delivery.—When stock is brought to the buyer in exact accordance with the rules of the Stock Exchange, it is called a "good delivery." When there are irregularities, the shares being of unacceptable issues, or the rules of the Exchange being contravened in some particular, the delivery is pronounced "bad," and the buyer can appeal to the board. Also when warehouse receipts for grain are delivered in fulfillment of contracts.

Delivery Day.—The first trading day of the month is usually called delivery day, but as all transactions are at the option of the seller, he may select and deliver the grain on any day of the month for which it has been sold.

Demurrage.—Charges made for the delay or detention of railroad cars and vessels beyond the time usually allowed for loading or unloading.

Deposit.—To place funds in a bank; a sum deposited at a certain time; the amount on deposit at any given time.

Discharge.—To pay off a debt; also to cancel a Mortgage.

Discount.—An amount deducted from the regular price or list.

Discount Rate.—The rate per cent. of interest charged by banks for the use of money loaned. It is always deducted from the principal when the loan is made.

Dishonor.—To refuse to accept a Draft, or to pay a Note or Acceptance.

Dividend.—A division of profits to Stockholders in a Corporation. A pro-rata payment to the creditors of a bankrupt estate; gain to be divided among stockholders.

Domiciliated.—A negotiable instrument payable in a different place from that in which it is drawn is domiciliated where payable.

Drawback.—A term used in shipping circles. It refers to rebates allowed from regular rates charged for transportation of merchandise.

Drop.—In stocks or grain is equivalent to a "break," except that it may be due to wholly natural causes.

Dun.—To press urgently the payment of a debt.

Duty.—A government tax paid on goods imported or exported.

E. and O. E.—Errors and omissions excepted.

Effects.—All values belonging to a concern (better styled Assets).

Embargo.—The detention of a vessel in port.

Embezzle.—To fraudulently appropriate money to one's own use.

Entry.—A record of a business transaction; depositing of a ship's papers at Custom House to procure license to land goods.

Entry Clerk.—A clerk who records sales.

Equity of Redemption.—A privilege allowed to a mortgagor of a reasonable time to redeem mortgaged property.

Errors Excepted.—A phrase inserted as a proviso, that the person who renders a statement may have the power of correcting any mistake that he may have committed.

Excise.—A tax levied on commodities produced within a country.

Ex-dividend.—A stock so sold does not include or carry to the buyer a recently declared dividend, but the dividend goes to the seller.

Executor.—One appointed to execute the will of another.

Exhaust Price.—The point at which one's margins will be exhausted. If trades are not re-margined they are likely to be closed out by the broker at the exhaust price, if it is reached by the market.

Exporting Countries.—Those producing a surplus of grain which finds a market in other countries where there is a deficiency. The principal exporting countries are the United States, Russia, Argentina, Hungary, India, Roumania and Australia.

Exports.—Goods sent out of a country.

Ex-store.—Out of store. Prices quoted "ex-store" are for goods in stock, the cartage or other shipping expenses to be paid by buyer. Opposite of "free-on-board."

Extend.—As applied to accounts, is to write the figures in the money column. An amount is entered "short" when it is placed at the left of the money column.

Extension.—An allowance of further time for the payment of a debt.

Face.—The amount for which a Note, Draft, or other Commercial Paper, is written.

Fac-simile.—An exact copy.

Failure.—The stopping of business of those who are unable to meet their liabilities.

Falling Market.—A continuous decline in prices.

False Pretences.—Statements made with a fraudulent design to obtain goods on credit.

Favor.—A Note, Draft, or Check, is drawn in favor of the party to whom it is made payable; a letter.

Finances.—The income or means of a corporation.

Financier.—One who collects or manages the finances; one skilled in money matters; pecuniary management.

Firm.—The designated title of a copartnership.

First Hand.—Obtained directly from the manufacturer.

Five Ports.—The four Atlantic ports and New Orleans.

Flat.—A term signifying that Stocks are sold without reference to accumulated interest; low in price; dull as to sales.

Flotsam.—Goods which float after being thrown overboard at sea or in case of shipwreck. The goods thus cast away are called jetsam or jettison if they sink and remain under water.

Flyer.—Synonymous with "for a turn."

F. O. B.—Free on board.

Folio.—Page of a book; a book bound in sheets folded once.

Footing.—The expressed amount of a column of figures.

Forced Sale.—A sale under compulsion, usually by auction.

Foreclose.—Applied to a mortgage, and means to deprive a mortgagor of the equity of redemption.

Foreign Exchange.—Drafts drawn on the financial centres of Europe, for instance, London, Berlin or Paris. Drafts on London are called Sterling Exchange, as they are drawn in pounds sterling.

Foreign Port Stocks.—Warehouse Stocks of grain at the principal European ports.

Forgery.—Altering Commercial Paper with fraudulent intent; making or passing a false Note, Draft, or Check.

Fractional Orders.—Orders for less than 5,000 bu. of grain or 100 shares of stock are called fractional orders, as the above amounts represent the units of speculation. Fractional orders are entirely regular both on the Chicago Board of Trade and the Stock Exchanges. Orders are executed in 1,000 bu. lots of wheat, but not in corn or oats. Neither is there any market for small quantities of provisions or cotton.

Free on Board.—The price at which goods are sold free of all shipping expenses.

Free Port.—A port where goods may be landed free from Custom-house restrictions.

Free Trade.—A free interchange of commodities between two countries; trade not regulated by duties.

Freight.—Sum paid for transportation of goods; goods carried for pay by water or by land.

Frozen Out.—Said of deals or trades closed out compulsorily because of inability to further protect contracts with remargins (See Margin.)

Full Extend.—To extend figures into the money columns.

Funded.—Put into a permanent loan on which an annual interest is paid.

Futures.—Buyers of cash grain protect themselves against possible loss by selling an agreed amount for future delivery in some general market, usually Chicago. Such contracts are called futures because they do not terminate until some designated month in the future. These transactions pass from hand to hand and may be turned over hundreds and thousands of times in an active market before maturity, and this is called dealing in futures. Nearly all speculative operations are in futures.

Gain.—Profit; increase in wealth.

Gauging.—The process of measuring contents, as of a cask or other vessel, to ascertain its capacity.

Go-between.—An agent for both parties to a business transaction.

Gold and Silver Certificates.—Certificates issued by the United States government, circulating as money, on the security of gold deposited with the government for that purpose, or of silver coin belonging to itself.

Gold Exports.—When this country buys abroad more than it sells abroad it must pay the difference, which is called the balance of trade, in sterling exchange. The par value of sterling exchange is $4.867, that is, a pound sterling is worth $4.867 in United States gold. The price of demand sterling exchange varies according to the supply and demand of bills drawn against London. If we have made heavy shipments to London, or if Europe has been a heavy buyer of our securities, there is plenty of sterling exchange in the market, and it can be bought below its par value. When we have made heavy imports from Europe, or when Europe has been a heavy seller of our securities, or when American travelers have spent a large amount of money in Europe, the supply of sterling exchange is limited and its price rises. If the price of sterling bills is as high as 4.88⅞ it is just as cheap to ship gold bars to London and pay the expenses of the shipment as it is to buy the exchange. If sterling exchange is $4.89¼ gold coin can be shipped without loss. If rates go higher, as for instance, to $4.90, gold coin or bars can be shipped at a good profit and exchange sold against them. When the rate of sterling exchange falls to $4.83½ gold can be imported from London without loss, and if it goes lower it can be imported with a profit.

Good Delivery.—A stock which exactly fulfills the conditions of sale and is delivered to the buyer in exact accordance with the rules of the Stock Exchange is known as "good delivery." If the shares offered are of an unacceptable issue, or the rules of the Exchange are violated in any particular, it is called "bad delivery" and the buyer can appeal to the Board.

Good Will.—The advantage or benefit which is acquired by an establishment beyond the mere value of the capital, stock, funds, or property employed therein, in consequence of the general public patronage and encouragement which it receives from constant and habitual customers on account of its local position. Friendly influence exerted with the view of transferring the custom of any shop or trade to a successor; the right and title to take up a trade or business connection purchased of an outgoing tenant or occupier.

Goulds.—Comprise Missouri Pacific, Western Union Telegraph, Manhattan Consolidated, and Texas Pacific roads.

Granger Roads.—Western railroads. This term was originally applied in Wall Street to the Chicago & Northwestern and the Chicago, Milwaukee & St. Paul roads, but is now employed on Stock Exchanges to designate those railroads which handle principally farm produce.

Gross.—Whole; entire; total; specifically without deduction, as for damage or waste material; without allowance of tare, opposed to *net*, as gross sum or amount, gross profits, income, or weight.

Guarantee.—A person to whom a guaranty is given, to warrant; to be warrant or surety for.

Guaranteed Stock.—Stocks of leased or a subsidiary company guaranteed by the principal company.

Guaranty.—Indemnity against loss.

Gunning.—Using every means to compel frightened "shorts" to cover, or weak holders to sell out.

Hard Spot.—A strong point in the market caused by good demand.

Hectolitre.—The unit of measurement of grain in France, one hectolitre being equal to 2.83 bushels.

Hedge.—The operation called hedging by speculators is practically the same as straddling, though the terms are not synonymous. Traders hedge to avert a loss and straddle for a profit. (See Straddle.)

Hog Products.—The various forms in which slaughtered hogs are prepared for consumption, such as pork, lard, short ribs, sides, hams, shoulders and bacon. Speculation in hog products is confined to the three first named.

Holding the Market is to buy sufficient stock or commodities to keep the price from declining.

Honor.—To accept a Draft, and to pay it when due.

Hypothecating.—Putting up collaterals for loans.

Importing Countries.—Those producing less grain than is required for home consumption and which rely on other countries to supply the deficiency. The principal importing countries are the United Kingdom, Germany, France, Italy, Belgium, Holland, Spain, Brazil, the West Indies, China and Japan.

Impost.—A tax levied upon imported goods.

Indemnity.—Guaranty against loss; amount of compensation for loss, damage, or injury sustained.

Indemnification.—Reimbursement of loss.

Indenture.—A written instrument.

Injunction.—A judicial process whereby a party is required to do, or to refrain from doing, a special act.

Insiders.—Those who own a controlling interest or an important interest in the stocks of a concern, and who are therefore influential in directing its affairs. Insiders are closely watched by the public, as their transactions often shape the market.

In Sight.—Said of stocks of grain, cotton, coffee, or other merchandise available for immediate use. Grain stored in private warehouses, or held by producers, is not usually included in the supply "in sight."

Insolvent.—Unable to pay one's debts; one who is insolvent.

Inspection.—Grain received at Chicago is inspected and graded by sworn inspectors under rules established by the Board of Railroad and Warehouse Commissioners, appointed by the State of Illinois. From this inspection, if not satisfactory, an appeal may be taken to the Inspection Committee of the Board of Trade. In other states similar laws exist.

Instalment.—Part of a debt paid or to be paid at a certain time.

Instant.—Day of present month.

Intestate.—Dying without having made a will.

Inventory.—A list of unsold property, showing its quantity and value, or of goods in a store.

Investment Buying.—This phrase is generally used in contra-distinction to buying for speculation, or for a quick turn in the market. It is understood to mean buying to hold for a considerable time.

Invisible Supply.—Stocks of grain in farmers' hands and country elevators outside of the official visible supply.

Invoice.—A detailed list of goods bought, which is sent by the seller to the purchaser.

Involved.—Embarrassed by debts.

Irish Dividends.—An assessment.

Jetsam or Jettison.—Allowance for goods thrown overboard in a storm to lighten the ship; also the goods thrown over.

Jobber.—A party that buys goods from importers or manufacturers to sell to retailers.

Job-Lot.—A miscellaneous assortment of goods to be sold for a lump sum and at a low price.

Kilo.—The unit of measurement in Germany and Belgium. Quotations from Antwerp are per 100 kilos, equal to 3.67 bu. Quotations from Berlin are per 1,000 kilos, equal to 36.74 bu.

Lease.—An instrument of conveyance of property for a limited time upon rental.

Legal Debts.—Debts that are recoverable in a court of common law.

Legal Tender.—That which the law authorizes to be tendered in payment of debts. Strictly speaking, it is the exact amount of the debt in current funds. It is not a legal tender to demand change.

Lessee.—The party to whom a lease is given.

Lessor.—The party from whom a lease is received.

Letter of Advice.—A letter of information concerning a shipment of goods or of the drawing of a Draft.

Liabilities.—Debts owned by a Concern.

License.—Legal permission to do a certain act.

Lien.—A legal claim upon property.

Lighterage.—A charge for conveying goods to or from a vessel in a harbor.

Limit.—A set figure at which one's trade is to be made or closed.

Limited.—In England, and in some states in this country, the stockholders in corporations and associations are exempted from individual liability on the condition prescribed by law that the names or titles of such bodies shall contain the word "limited," which shall be always used in all business of the concern.

Liquidating Market.—The forced elimination of an excessive long or short interest in a market, the shorts being forced to cover at an advance or the longs to sell at a decline—in either event bringing about a re-adjustment of the volume of contracts within normal conditions. A compulsory reëstablishment of the speculative equilibrium.

Liquidation.—When employed by speculators, this term signifies the selling out of property previously bought or contracted for. The expression "liquidation by longs" is in contradistinction to "covering by shorts." In a market where both processes are extensively carried on it is called "evening up."

Loan.—A sum lent for a temporary purpose.

Long.—One who has property bought in anticipation of a rise in price. Hence, for a trader to be "long" of stocks or grain presupposes him to be a "bull." Also used adjectively.

Long Interest.—The aggregate amount of investment holdings in any speculative market.

Long Market.—A market that is overbought, the volume of open contracts to buy property for future delivery being in dangerous excess of the probable demand.

Long Price.—The list price from which the trade receives a discount.

Manifest.—A list of a vessel's cargo.

Manipulated Market.—A market under artificial control.

Margin.—Money or collaterals deposited with a broker to protect contracts, usually for future delivery.

Mark.—(German Empire.) A coin valued at 23.8 cents.

Maturity.—The Date when a Note or Draft falls due, *i.e.*, arrival of the time fixed for payment.

Mercantile Agency.—A Concern which procures information relating to the financial standing and credit of merchants for the use of others, to whom said merchants may apply for credit.

Merchandise Broker.—One who buys or sells Merchandise on a Commission, but does not keep a store or goods; a middle man between buyer and seller.

Monopoly.—The sole power of dealing in any species of goods or with any country or market.

Mortgage.—A pledge of property to secure the payment of a Note and it becomes void upon payment of the Note.

Mortgagee.—The party to whom a mortgage is given.

Mortgagor.—The party who mortgages his property to another.

Negotiable.—Applied to a contract, the right of action on which the contract is capable of being transferred by delivery, or indorsement and delivery.

Negotiable Paper.—Notes, Drafts, or other written obligations, which may be bought and sold.

Negotiate.—To dispose of; to convert into money.

Net.—Clear of all charges and deductions: as net profit, net weight

Net Cash.—A term applied to a bill of goods to be paid without any allowance or discount, and without reference to time, but by common custom understood to be 30 days, unless otherwise specified.

Net Proceeds.—The amount property produces after all charges have been deducted; the remainder after deducting all charges from the amount of gross sales.

Nominal.—Existing in name only.

Notary Public.—An officer commissioned to protest negotiable paper for non-payment; or to take acknowledgments of legal documents under his notarial seal.

Obligation.—That which legally binds a party to perform a duty.

O. K.—To O. K. an account is to initial it in evidence of its correctness.

On Call.—When money is loaned "on call" it is understood that it must be returned the day it is called for, before the close of banking hours and without previous notice.

On Credit or On Account.—Buying or selling goods to be paid for at a future day.

Open Account.—An unsettled account.

Opening an Account.—Writing its title in the Ledger; to commence dealing with a Concern on credit.

Option.—Property bought or sold at the call or demand of the buyer or seller, as may be specified; a conditional contract.

Outlawed.—Term applied to a debt or Note which has run beyond the time when its payment can be enforced by law.

Out of Condition.—When grain in store is injured by insects, dampness, heating, or any other causes sufficient to lower its grade it is designated as being "out of condition."

Outside Markets.—Chicago is the principal grain market of the world and the leading domestic markets outside of it are usually termed "Outside Markets."

Outsiders.—The general trading public. The investors in stock or grain who base their judgment largely on the general situation.

Outstanding.—Unsettled; unpaid.

Outstanding Accounts.—Ledger debts not yet collected.

Overbought.—Said when more property is bought than is warranted by conditions, entailing danger of a reaction in prices. Applicable to a market or to individuals.

Overcharge.—A charge at a higher rate than that agreed upon or than usual rates.

Overdraw.—To issue a Check for more than the Concern's deposit.

Overdue.—Remaining unpaid after maturity.

Overissue.—An issuing, as of stock, beyond or in excess of the capital stock.

Oversold.—The reverse of Overbought.

Overtrading.—Speculation carried to unsafe limits.

Paper Profits.—Profits on contracts not yet closed, and consequently not yet in hand.

Par.—Equal to face value. Exchange is at par when a bill in New York for the payment of one hundred pounds sterling in London can be purchased for that sum.

Par of Exchange.—Equivalent value of the currency of a country in that of another.

Partial Payment.—Part payment of a debt.

Partner.—An associate in business.

Passing a Dividend.—When the directors of a corporation vote against declaring a dividend it is said to be "passed." This is nearly always the cause of great weakness in the stock.

Pegged.—Said of a market that refuses either to advance or to decline, because brokers have been supplied with selling or buying orders in excess of the demand.

Personal Property.—A term applied to all property that is not Real Estate.

Pit Traders.—Brokers who are in the pit daily trading for their own account.

Point.—On stock exchanges "a point" is understood to mean one dollar a share. A decline in Missouri Pacific from 25 to 22 would be a decline of three points.

Pool.—The stock and money contributed by a syndicate to control the price of a given surety or commodity. Also refers to the individuals composing the pool.

Post Date.—To date after the real day.

Posted Rates.—The posted prices at which bankers sell foreign exchange in small amounts to travelers and to small merchants.

Pound Sterling.—(£). A British denomination of money of amount equal in value to $4,866\frac{1}{2}$. There is no coin known by this name, but the gold sovereign is of equal value.

Power of Attorney.—An instrument legally authorizing one party to transact business for another.

Preferred Stock.—Shares of a corporation having preference over ordinary shares, but not over bonded or mortgage indebtedness. Preferred stock is usually issued for borrowed capital. Earnings, if any are left after paying interest on the bonded debt, go next to pay a dividend on the preferred stock, and only what then remains is applied to the common stock.

Price Current.—A journal published weekly at Cincinnati in the interest of markets and statistics. Its crop estimates and information on crops, live stock and packing industries are considered reliable.

Price List.—A list of articles for sale with prices attached.

Privileges.—"Puts" and "Calls." "A put" is the privilege or option, which a person purchases, of "putting," *i. e.*, delivering, property or contracts for property to the seller of such privilege, at a named price within a stipulated time—one or more days, weeks or months. "Puts" are good (from the buyer's standpoint) when the market declines below the "put" price within the time covered by the privilege contract. The buyer can then buy the property at the cheaper figure and "put" it to the person who sold him the risk, his profit being the difference between the "put" price and the quotation at which the property is bought with which to make the delivery. A "call" is the reverse of a "put," the purchaser of a "call" acquiring the right to "call" upon the seller of the privilege for property, or contracts for

property, at a named price within a stipulated time. "Calls" are good when the market advances above the call price, and the buyer of such privilege is enabled to sell at a profit the property "called" from the seller of the privilege. The seller of privileges occupies, in a sense, the position of an insurance or guaranty company. He sells market risks as an insurance company sells fire, life or accident risks. Trading in privileges is illegal in some states, notably in Illinois. Prices paid for privileges are usually $1.00 per thousand bu. for a single day, $1.25 for a week or ten days, and from $2.50 to $7.50 for a month or during the life of a distant option.

Promoters' Shares.—Those issued by corporations in payment of the services of promoters in the organization of the companies.

Proprietor.—The conventional owner of a business.

Pro Rata.—An equitable division by proportion.

Protecting.—Accepting or paying a Draft.

Protest.—A notice, issued by a Notary Public, stating that a certain Note or Draft has not been accepted or paid at maturity, and that its indorsers are held responsible for its payment.

Puts.—(See Privileges.)

Pyramiding.—Enlarging one's operations by the use of profits which one has made. For instance, if one buys 5,000 bu. and the market advances 2 cents he sells, realizes $100 profit, and with this in addition to his additional margin he buys 10,000 bu. wheat, which he closes on a further advance and makes a still larger investment. On steadily advancing markets with moderate reactions this plan makes large profits, but must not be followed too far and liberal margins should be kept.

Quarantine.—Restraint of intercourse to which a vessel is subjected upon supposition that she may be infected with disease.

Quarter.—The fourth of a ton in weight. In England they reckon 2,240 pounds to the ton; there are 480 pounds, or eight bushels, in a "quarter" of wheat.

Quintal.—A metric measure equal to 220.46 lbs. avoirdupois.

Quotations.—Published current prices of stocks, bonds, etc.

Rebate.—The return or repayment of a percentage of an amount paid for property, transportation, commissions, etc.

Receivers' Certificates.—Those issued by a receiver for the purpose of raising money for a company in the jurisdiction of a court. When approved by the court and issued they are a first lien upon the net earnings and property of the company.

Receiving Clerk.—A clerk that receives goods, checks each item on the Invoice, and then passes the Invoice to the bookkeeper.

Re-Consign.—To send a consignment to another market at request of its Consignor.

Registered Bonds.—That class of Government Bonds which are payable to the order of some individual or corporation, whose name is registered as the owner thereof in the Government offices at Washington. Such bonds, if stolen or lost, cannot be realized upon.

Regular Stock.—The term regular is used in Stock Exchange transactions to distinguish it from a transaction in the account. When stock is sold regular, the actual stock is delivered the following day and paid for by the receiving broker in full.

Remittance.—Value, as bills or money transmitted to another.

Renewal of a Note.—Extending the time of its payment by giving a new Note in exchange for it.

Replevin.—To take or get back, on a writ, goods unlawfully taken; to recover possession of goods wrongfully taken.

Resources.—Property owned by, or debts due to, the Concern.

Retail.—To sell in small quantities.

Retire.—To relinquish business; to withdraw from circulation.

Revenue.—The income of a State or Country.

River Plate.—The Rio de La Plata in South America, forming the boundary line between Uruguay and Argentina. The country tributary to it is largely wheat-producing, and wheat from that locality is called in general "River Plate Wheat."

Sack.—Jute sacks (or bags) in which flour is exported contain 140 pounds. To reduce sacks to barrels, multiply by 5 and divide by 7. The English sack contains 280 pounds. A sack of coffee is estimated at 200 pounds of Rio and 133 pounds of Java.

Sale.—A transfer of property from one party to another for a certain price.

Salting.—Placing valuable ore in a mine with a view to deceive a possible purchaser.

Sample Crowd.—The set of brokers who deal almost wholly in car-lots of grain by means of small samples which are displayed upon the sample tables in the Board of Trade.

Salvage.—Compensation paid or allowed for saving property from loss at sea.

Scalper.—One who trades in options continually and, by reading the temper of the market at the moment, tries to get a profit out of the minor fluctuations; also applied to irregular railroad ticket brokers. The term is coming into general use in other lines

Scalping.—Buying and selling on small fluctuations of the market. Taking a small profit or a small loss.

Schedule.—An inventory or catalogue of goods, and generally with prices.

Scrip.—An embryo stock with no voting or dividend rights until combined with something else to make a share of stock. Dividends payable in stock issued on the capital of a company.

Seigniorage.—The difference between the commercial value of bullion in coin and the face value of the coin itself.

Sellers' Option.—All future contracts are at the sellers' option to deliver the grain on any business day of the delivery month. Therefore the buyer must stand ready to take the grain on any day of the delivery month, or turn his contract over to some one else by selling out the first day of the delivery month.

Seller the Year.—A contract giving the seller the privilege of delivering property at any time within the year. Example: A buys of B, through a broker, 5,000 bushels of "year" wheat. A has not the right to demand the delivery of the wheat before the last business day of the calendar year. B, however, has the privilege of tendering the grain at any time.

Set-Off.—One demand placed against another.

Shipping Clerk.—A clerk that attends to packing goods, marking their cases, and getting a receipt from the transportation company.

Short.—Inadequate; deficient, as "short in Cash."

Short Extend.—To extend figures to the immediate left of the money columns.

Short Interest.—The seller of a property which he does not possess and will not deliver until he has afterward bought the same is

called "A Short." The aggregate amount of such shortage by these sellers is called the "Short Interest."

Short Market.—A market that is oversold; the volume of open contracts to deliver property being in dangerous excess of available supply.

Short Selling.—The process of selling property for future delivery in the expectation of being able to obtain the property cheaper before the maturity of contract, or of being able to close out the contract at a profit without the actual delivery of the property.

Sight.—Time of presenting a Draft to its Drawee.

Signature.—A person's name written by himself.

Silver Certificates.—Those issued against standard silver dollars deposited in the treasury, in denominations of $1, $2, $5, and $10, and higher denominations. Not legal tender, but receivable for public dues.

Sine Die.—Without fixing a day.

Sinking Fund.—A sum of money set apart for the redemption of the debts of a corporation or government.

Solvent.—Able to pay one's debts.

Sovereign.—(Great Britain.) A gold coin the same in value as pound sterling, or $4.866½.

Speculation.—Buying commodities not needed for use, or selling commodities not owned, with the hope of making profits by fluctuations in the values of these commodities. A speculator buys wheat because he hopes to sell it at a better price, but not because he needs it for use. He sells Sugar stock because he believes he can buy it at a cheaper price later, and make the difference.

Split.—A transaction, one-half at one quotation and one-half at another. For instance, the quotation 53⅝—¾ means that one-half of the quantity traded in was at 53⅝ and the other at 53¾. This quotation is just half-way between 53⅝ and 53¾. Only an even number of thousand bu. can be traded in on a split, as for instance 2,000, 6,000, 10,000, etc.

Spot Cash.—A term applied to a sale of goods to be paid for on delivery, *i. e.*, C. O. D.

Spread.—A "spread" is a double privilege entitling the holder to deliver to, or to demand from, the signer a certain amount of stock on

the terms specified. Differences in prices, as between May and July wheat, or between the put and call price, or between the price of the same option in different cities.

Statute of Limitations.—An assigned period within which legal action must be commenced to enforce payment.

Sterling Exchange.—A Bill of Exchange drawn on London. This is the most general current exchange and is good for the payment of debts anywhere. Our shippers of cotton, grain, flour and merchandise receive bills of lading with draft attached which they sell to foreign exchange houses here, who issue their bankers' bills against these commercial bills.

Stock.—Certificates issued by a corporation certifying that the person in whose name they are written and stand registered on the corporation books is entitled to share in the company's profits, to vote, etc.

Stock, Assessable.—That is liable to assessment.

Stock, Cumulative.—One on which a corporation agrees to pay past due dividends before declaring a dividend on stocks coming after it in the distribution of net earnings.

Stock Exchange.—An incorporated body of brokers, who buy and sell Stocks, Bonds, and other values.

Stock, Non-Assessable.—Stock carrying with it no liabilities.

Stock on Hand.—Unsold goods.

Stock, Preferred.—That having a preference to other stock in the payment of dividends.

Stocks.—Negotiable debts of government drawing interest, or shares in joint stock corporations paying dividends.

Storage.—Amount charged for keeping goods in a warehouse.

Straddle.—A trader who is "long" of one option and "short" of another option has "straddled" the market. Example: A buys corn for May delivery and sells an equal amount for December delivery in the expectation that the former will advance and the latter decline. It is also called a "straddle" when a trader buys property for future delivery in one market and sells in another.

Sue.—To bring an action in law.

Supercargo.—A person appointed to superintend the sale of a cargo of a ship, purchase returning cargoes, etc.

Surety.—One who signs the bond of an executor of a will, or administrator of an estate, for the purpose of guaranteeing the faithful performance of his duties as such executor or administrator.

Suspend.—To stop payment temporarily.

Syndicate.—A number of capitalists who unite to dispose of a loan, or to conduct a great financial enterprise.

Tailer.—A follower. One who having a small capital and little confidence in his own judgment follows the lead of a successful trader or clique.

Taking Stock.—Making an inventory of unsold goods.

Tariff.—A table of duties, fixed by national law, to be paid on Merchandise imported or exported.

Tender.—An offer; a proposal for acceptance.

Tierce.—A cask of lard containing 340 pounds. The quotations of lard are so much per 100 lbs. and to get the value of a tierce they must be multiplied by three and two-fifths.

Tonnage.—Weight or measurement of a cargo; capacity of a ship; also a duty on ships estimated per ton.

Trade.—A company of persons engaged in the same occupation; business of buying and selling.

Trade Discount.—A deduction of a certain rate per cent. from the face of a bill made by wholesale houses and others in trade.

Trade Mark.—A distinguishing mark used by a manufacturer on his goods or labels.

Trade Price.—A price, lower than the retail price, allowed to merchants (usually) of the same trade.

Trade Sale.—A special sale of goods suited to a particular class of dealers.

Transfer.—1. A legal conveyance of value.

2. To carry from one account to another.

3. To carry goods from one place to another.

Trunk Lines.—Through lines of railroad from the Atlantic seaboard to Chicago or more western points.

Trust.—A combination of manufacturers or dealers for the purpose of limiting production and advancing prices for their own benefit.

Trustee.—1. A party to whom business is legally entrusted.

2. To stop payment by legal process, as of the salary of an employé.

Underwriter.—A party who insures, generally a vessel or cargo.

Usance.—Custom or business usage; the time which by usage or custom is allowed for the payment of a bill of exchange.

Usury.—Illegal interest (exorbitant).

Value.—Anything valuable in itself or representing value or to estimate value.

Vanderbilts.—The principal railroads controlled by the Vanderbilt interests, which are the New York Central, West Shore, Lake Shore, Michigan Central, Canada Southern, Nickel Plate and Northwest. These are all excellent properties, with the stock closely held among the Vanderbilt interests and therefore not subject to great fluctuations.

Voucher.—A receipt, paper, or document, whose production establishes a fact.

Warehouse.—A storehouse for goods.

Warehouse Receipts.—A receipt issued by a warehouseman for property received by him in store and held for the consignee or his assignee. They are assignable, and according to mercantile use and understanding in this country the transfer of the document completes the delivery of the property.

Wares.—Merchandise of any kind.

Wash Trades.—Pretended trading. Trades made on an open market by parties between whom there is a tacit or private understanding that they shall be void. Done with a view to influence price and considered a reprehensible practice.

Watered Stock.—An increase in capitalization without a corresponding increase in assets.

Wharfage.—Money paid for the use of a wharf.

Without Recourse.—Not liable as an indorser if written over an indorser's signature on the back of commercial paper.

CHARACTERS.

@ At.
a/c Account.
% Per cent.
# Number.
$ Dollars.
¢ Cents.
√ Check mark.
d. Pence.
£ Pound Sterling.
s. Shillings.

,, Ditto, the same.
× By, as 9 × 12.
1¼, One and one-fourth.
1½, One and one-half.
1¾, One and three-fourths.
+ Addition.
— Subtraction.
× Multiplication.
÷ Division.
= Equal to.

ABBREVIATIONS.

A 1. First-class.
Acc. or Accep. Acceptance.
Acct. Account.
Acct. Cur. Account Current.
A.D. In the year of our Lord.
Ad. Advertisement.
Admr. Administrator.
Admx. Administratrix.
Adtg. Advertising.
Adv. Adventure.
Agm't. Agreement.
Agt. Agent.
Amt. Amount.
Ans. Answer.
Ap'l or Apr. April.
Arr. Arrived.
Assd. Assorted.
Asst. Assistant.
Att'y. Attorney.
Aug. August.
Av. Average.
Ave. Avenue.

B. or b. Book.
Bal. Balance.
B. B. Bill Book.
Bbl. Barrel or Barrels.
Bdl. Bundle.
B / E. Bill of Exchange.
Bgs. Bags.
Bk. Bank.
Bkts. Baskets.
B / L. Bill of Lading.
Blk. Black.
Bls. Bales.
B. O. Buyer's Option.
Bot. Bought.
B / P. Bill of Parcels.
B. Pay. or B. P. Bills Payable.
B. Rec. or B. R. Bills Receivable
Bro. Brother.
Bros. Brothers.
Brot. Brought.
B / S. Bill of Sale.
Bu. or Bush. Bushel or Bushels.

Bx. Box.
Bxs. Boxes

C. or Centum. Hundred.
Cap. Capital.
Cash. Cashier.
C.B. Cash Book.
Cd. Cord.
Cert. or Certif. Certificate.
Chgd. Charged.
Chgs. Charges.
Chts. Chests.
Ck. Check.
Clk. Clerk.
c/o. Care of.
Co. Company. County.
C. O. D. Cash on Delivery. Collect on Delivery.
Col'd. Colored.
Coll. Collection.
Com. Common. Commission Commercial.
Const. Consignment.
Cr. Credit. Creditor.
Cs. Cases.
C. S. L. Commission Sales Ledger.
Ctg. Cartage or Carting.
Cts. Cents.
Cwt. Hundredweight.

d. Pence.
D. B. Day Book.
Dbk. Drawback.
Dec. December.
Depos. Deposit. Deposited.
Dept. Department.
Dft. Draft.
Disc't. Discount.
Div. Dividend.
Do. The same.
Dols. Dollars.
Dom. Domestic.
Doz. Dozen.
Dr. Debit. Debtor.

Dray. Drayage.
Ds. Days.
Dwt. Pennyweight.

Ea. Each.
E. E. Errors Excepted.
E. & O. E. Errors and Omissions Excepted.
e.g. For Example.
Embd. Embroidered.
Eng. English.
Entd. Entered.
Et al. And another.
Etc. And so forth.
Ex. Example. Express.
Ex. Without, as Ex-Dividend.
Exch. Exchange.
Exp. Expense.

Fav. Favor.
Feb. or Feb'y. February.
Figd. Figured.
Fol. Folio.
F. o. b. Free on board.
For. Foreign.
Ford. Forward.
Fr. From.
Frt. Freight.
Ft. or (′). Feet.

Gal. Gallon.
Grs. Gross.
Guar. Guaranty.

Hdkf. Handkerchief.
Hf. Half.
Hhd. Hogshead.

I. B. Invoice Book.
i.e. That is.
In. or (″). Inches.
Ins. Insurance.
Inst. Instant (present month).
Int. Interest.

Inv. Invoice.
Invt. Inventory.
I. O. U. I owe you.

J. Journal.
J. F. Journal Folios.
Jan. or Jan'y. January.
J. D. B. Journal Day Book.
Jr. Junior.
Jul. July.
Jun. June.

£. Pound Sterling.
L. B. Letter Book.
Lbs. Pounds (in weight).
Led. or L. Ledger.
L. F. Ledger Folios.
L. and G. Loss and Gain.
L. S. Place of Seal.

M. Thousand.
Mar. or Mch. March.
Mdse. Merchandise.
Memo. Memorandum.
Messrs., plural of Mr. (used as a prefix).
Mnfg. Manufacturing.
Mo. Month.
Mos. Months.
Mols. Molasses.
Mr. Mister.
Mrs. (a prefix). A married lady (pronounced *misses*).
MSS. Manuscript.
Mtg. Mortgage.

N. B. Take Notice.
N. C. Net Capital.
N. G. Net Gain; also "No good."
N. L. Net Loss.
N. P. Net Proceeds.
Nat. National.
No. Number.
Nov. November.

O. B. Order Book.
Oct. October.
Opp. Opposite.
Oz. Ounce.

p. Page.
P. and L. Profit and Loss
℔. Per.
pp. Pages.
Payt. Payment.
P. C. B. Petty Cash Book.
Pcs. Pieces.
Pd. Paid.
Per. By.
Per cent. By the 100.
Pk. Peck.
Pkg. Package.
Pref. Preferred.
Prem. Premium.
Prox. Next Month.
Pr. Pair.
Prs. Pairs. Also used for prices.
P. S. Postscript.
Pt. Pint.

Qe. Quire.
Qr. Quarter.
Qt. Quart.
Qtls. Quintals.

R. B. Receipt Book.
Rec'd. Received.
Rec'pt. Receipt.
Ret'd. Returned.
R. R. Railroad.

S. Sales (when reference is mad in posting).
S. B. Sales Book.
Sch. or Sch'n. Schooner.
Sds. Sides.
Sept. September.
Shipt. Shipment.
Shs. Shares.

Sks. Sacks.
S. O. Seller's Option.
Sq. Square.
Sr. Senior.
S.S. Steamer.
ss. to wit, namely.
St. Street.
Stbt. Steamboat.
St. Dft. Sight Draft.
Stg. Sterling.
Str. Steamer.
Sund. Sundries.
Super. Superfine.
Supt. Superintendent.

T. B. Trial Balance.
Tcs. Tierces.
Trans. Transaction, or Transferred.

Ult. Last month.

Viz. Namely.
Vol. Volume.
Vs. Versus (against).

W. B. Way Bill.
Wt. Weight.

X. Extra.

Yd. Yard.
Yr. Year.

Mercantile Arithmetic

A Course of Lessons for Young Men Entering Commercial Life.

Introduction.

The young man or young woman who really desires to profit by a course of instruction in arithmetic must actually work out the exercises and not simply look into "how they are done." For this reason the author thought best to present here a series of examples and exercises with carefully prepared hints and suggestions rather than an exhaustive treatise on the theory and science of the subject. Fully two-thirds of the arithmetic taught in the public and high schools of this country is nothing more than finger exercise, and so far as actual benefit is concerned the children might much better be darning stockings. To do an exercise which has no practical value and which does not produce any mental growth is, to say the least, to spend time foolishly. The boy who fails to solve a problem after spending an hour's hard labor upon it, gets one hundred times the benefit from the exercise that the boy gets who solves the problem correctly in a minute. It is the effort which we make, not what we accomplish, which counts in the educational world.

American Money.

Most Americans are familiar with their own money. The student will find the subject fully treated in the chapter on banking. Almost all the arithmetic of trade and finance deals either directly or indirectly with money. The student will find the following examples interesting:

1. You receive a somewhat worn $10 gold piece. You find that it weighs 215 troy grains. What is its value?

(*Ans.* $8.33.)

2. A book agent bought 90 books at $2.75 each. He sold them at $5 each. His expenses were $12 25. He was unable to collect for three books. How much did he gain or lose?

(*Ans. G.* $175.25.)

3. A ton of coal lasts a family 14 days. If coal is worth $5.25 a ton, what will their coal cost from Oct. 1st of one year until March 31st of the next? (*Ans.* $68.25.)

4. A merchant's cash receipts for a week are $231.14, $125.63, $632.84, $321.15, $424.17 and $563.85. Find his daily average.

(*Ans.* $383.13.)

5. If 5 shillings be worth $1.22, how much should one receive for an English P O. money order for £24. 11s. 6d.?

(*Ans.* $119.93.)

Gains and Losses.

The difference between the cost of anything and the price at which it is sold is a gain or a loss—a gain when the selling price is the greater, and a loss when the cost is the greater. Almost the entire business of the country is conducted for the purpose of profit, and for this reason commercial arithmetic is made up largely of computations of gains and losses. Try the following examples:

6. A milk dealer buys 27 ten-gallon cans of milk each day at $1.75 a can. He keeps three delivery wagons at an expense of $1.75 a day, and sells milk at 7 cents a quart. Find his gain in ten weeks, including Sundays. (*Ans.* $1,617.)

7. A man bought a house and lot for $7,842. He built an addition to the house at a cost of $1,640. The house was destroyed by fire, and he received insurance $3,520. He then sold the lot for $5,212. How much did he lose? (*Ans.* $750.)

8. A merchant had goods on hand at the first of the year valued at $12,324. He bought goods at a cost of $7,623, and sold goods for $14,265 during the year. At the end of the year his stock-book shows goods on hand worth $8,937. How much did he gain during the year? (*Ans.* $3,255.)

9. A grocer bought 100 loads of potatoes, of 30 bushels each,

at 37½ cents a bushel. Allowing 7½ bushels for waste, how much will he gain by retailing the remainder at 15 cents a peck?

(*Ans.* $670.50.)

How to Make Change.

Salesmen usually make change **by addition.** They have the money to count out, and in doing so, they add to the amount of the purchase until they reach the amount of the bill presented. For example, if you buy something worth $3.35 and present a ten-dollar bill in payment, you will probably receive in return 5 cents, 10 cents, 50 cents, $1, and $5, the salesman saying, 40, 50, $4, $5, $10. This method is least liable to error. Accuracy and rapidity in counting out change can be acquired best by practice behind the counter or at the cash-desk.

10. If you have no change except a 25-cent piece, a 50-cent piece, and a $5 bill, how can you pay a bill of $1.65, if the collector has two 10-cent pieces and several $2 bills?

11. You owe $4.40, and have a $10 bill, a silver dollar, and 3 10-cent pieces. The collector has $7 in bills, three 25-cent pieces, and a 5-cent piece. How can change be made?

Hints on Decimals.

Many persons who are thoroughly familiar with ordinary fractions, find much difficulty in multiplying or dividing **decimals** correctly. The fraction ½ when written in the form of a decimal is .5. To change a decimal to a fraction write for denominator *one* followed by as many ciphers as there are digits after the decimal point. $.5=\frac{5}{10}=\frac{1}{2}$. $.2=\frac{2}{10}=1\text{-}5$. $.04=\frac{4}{100}=\frac{1}{25}$. Remember that .50 is the same as .5. Annexing ciphers to a decimal does not alter its value. $4\times4=16$. $.4\times.4=.16$. $.04\times.004=.00016$. There are always as many decimal places in the product as in the multiplier and multiplicand together.

PRACTICAL EXERCISES.

12. Ten times a certain decimal is 3: what is one-tenth of the decimal? (*Ans.* .03.)

13. To the difference between 5 and .5 add .05. (*Ans.* 4.55.)

14. Multiply .006 by ½ and divide the product by 3.

(*Ans.* .001.)

15. Find the cost of 3,235 pounds of coal at $5.25 a ton.

(*Ans.* $8.49.)

16. Find the cost of 6,284 feet of lumber at $12.35 a M. (*Ans.* $77.61.)

17. Find the cost of constructing 5,984 feet of sidewalk at $137.50 per thousand feet. (*Ans.* $822.80.)

Weights and Measures.

Avoirdupois weight is used in weighing all articles except precious metals and dry medicines. One ton equals 2,000 pounds. One pound equals 16 ounces. One stone equals 14 pounds. **Liquid measure** is used in measuring liquids. There are 4 gills in a pint, 2 pints in a quart, and 4 quarts in a gallon. There are 31½ gallons in a barrel. **Dry measure** is used in measuring dry articles. There are 8 quarts in a peck, and 4 pecks in a bushel. The United States standard bushel measures 2,150.42 cubic inches. **Time** is measured by seconds, minutes, hours, days, weeks, months, and years. All years divisible by 4, except centennial years, are leap years. All centennial years divisible by 400 are leap years. There are 12 dozen in a **gross**. There are 24 sheets in a **quire**, and 20 quires in a **ream**.

18. How many pints of oil in a vessel containing 15 gallons? (*Ans.* 120 pts.)

19. A fruit dealer bought 5 bushels of cherries at $2.50 a bushel, and sold them at 15 cents a quart. Did he gain or lose, and how much? (*Ans. G.* $11.50.)

20. What is the value of 3,426 bushels of potatoes at 42 cents a peck? (*Ans.* $5,755.68.)

21. A boy bought a gross of penholders for 80 cents and sold them at 3 cents each. Find his profit. (*Ans.* $3.52.)

Percentage.

The term **percentage** is applied to certain arithmetical exercises in which 100 is used as the basis of computation. **Per cent.** (written %) is an abbreviation of the Latin *per centum*, meaning "by the hundred." The **rate** is the number which denotes how many units are taken in each hundred.

22. What fraction of $200 is $5? What per cent?

23. A clerk who received $325 a year had his salary raised 40 per cent. What does he receive now? (*Ans.* $455.)

24. A lawyer collected a debt of $3,264, and charged 5 per cent. for his services. How much did he pay over?

(*Ans.* $3,100.80.)

25. Ten years ago the population of a city was 26,276. Its present population is 31,530. Find the increase per cent.

(*Ans.* 20 per cent.)

26. What per cent. above cost must a man mark his goods in order that he may take off 10 per cent. from the marked price and still make 20 per cent. on the cost? (*Ans.* 33⅓ per cent.)

27. A manufacturer's earnings for two years amounted to $6,560; the earnings the second year were 5 per cent. more than the earnings the first year. Find the amount of the second year's earnings.

(*Ans.* $3,360.)

28. Ice expands ten per cent. in freezing: how many cubic feet of ice will weigh one ton, given that one cubic foot of water weighs 62½ pounds? (*Ans.* 35.2 cub. ft.)

29. A grocer gained 25 per cent. by selling 12 pounds of sugar for one dollar. How much per cent. will he gain by selling 15 pounds for one dollar?

30. The general market price of sugar advances 20 per cent. A grocer, to meet the advance, charges for 12 pounds what he before charged for 15 pounds. He made 30 per cent. at the former price: what will his profit be at the increased price?

31. My goods are marked at an advance of 17½ per cent. upon cost. I allow a dealer 5 per cent. off on a particular sale and my profit is $465. What did the goods sell for? (*Ans.* $4,465.)

32. A merchant's cash selling price is 20 per cent. in advance of the cost price of his goods, and 20 per cent. below the credit selling price. What is the cost price of an article marked $15?

33. A retail merchant's sales for a certain week show the following footings: Mon., $984.67; Tues., $735.42; Wed., $409.87; Thurs., $909.80; Fri., $568.73; Sat., $291.51. His selling prices are 30 per cent. in advance of cost prices.

(*a*) When he buys and sells for cash, what is his profit on the week's sales?

(*b*) When he buys on 4 mo. and sells for cash, what is his net profit on the week's sales.

(*c*) When he buys for cash and sells on 4 mo., what is his net profit on the week's sales?

Consider money worth 6 per cent. and that the goods remain on the shelves one month in each instance.

(*d*) Give the answer to (*c*) allowing 10 per cent. for bad debts.

Trade Discount.

When a reduction is made from the nominal price of an article, from the amount of a debt, or from the face of a note, it is called a **discount**. The **list price** is usually the catalogue price, or the retailer's selling price. The manufacturer or wholesale dealer allows the retailer a **trade discount** which is deducted at a certain rate per cent. from the face of the invoice. The amount of the discount depends sometimes upon the amount of the order, and sometimes upon the terms of settlement. Very often two or more discounts are deducted in succession. Thus 10 per cent. and 5 per cent. off, or, as it is generally expressed in business, 10 and 5 off, means a discount of 10 per cent., and then 5 per cent. from what is left. This is not equivalent to a discount of 15 per cent. The result is not affected by the order in which the discounts are taken. Note the following illustrative examples.

1. Invoice $80. Dis. 20 and 10 off. Find net amt.

$80.00
16.00 Multiply by 2 and carry one place to the right.

64.00
6.40 Carry one place to the right.

$57.60 *Ans.*

2. Invoice $324.45. Dis. 30 and 5 off. Find net amt.

$324.45
97.335 Multiply by 3 and carry one place to right.

227.115
11.355 Take half and carry one place to right.

$215.76 *Ans.*

34. A dealer gives 25 and 10 off. Find the net amount of an invoice of $420. (*Ans.* $283.50.)

35. What is the difference of a bill of $425 between a discount of 50 per cent and a discount of 30 per cent. and 20 per cent. (*Ans.* $25.50.)

36. An agent buys 3 pianos, the list prices of which are $420, $630, and $800. He is allowed 20 and 10 off. He sells the pianos at an advance of 50 per cent. on the cost prices. Find his total profit. (*Ans.* $666.)

37. A book jobber buys books at 40 and 10 off list prices. He marks his stock at an advance of 10 per cent. on list prices. He makes a large sale to a public library at a discount of 20 per cent. from his marked prices and makes a net profit of $6,324. How much did the books cost him?

38. A commission merchant buys at 30 per cent. and ½ off, and sells at 20 per cent. and 5 per cent. off. During a certain week his salesbook shows the following totals: Monday, $9.368.40; Tuesday, $3,689.46; Wednesday, $2.478.35; Thursday, $[illegible]198.47; Friday, $7,248.36; Saturday, $9,406.27. What is his profit for this particular week?

Commission.

Commission is an allowance or compensation to an agent or jobber. The business of a broker is very similar to that of a commission merchant except that the former does not usually have possession of the merchandise bought or sold. The person who sends goods to be sold is called the consignor or shipper. The name consignment is given to the goods sent. The commission or brokerage for buying or selling merchandise or real estate is usually estimated at a certain per cent. of the amount invested or realized. A commission merchant, in selling, reckons his commission on the amount he *receives* for the goods; in buying, on the amount he *pays* for the goods. The student should work the following examples:

39. An estate dealer sells a house and lot for $5,620 at 2½ per cent. What is his commission? (*Ans.* $140.50.)

40. A manufacturer sent $5,202 to a leather dealer with which to purchase leather at 2 per cent. commission on the sum invested. How much commission should he deduct? (*Ans.* $102.)

41. An agent charged $75 for selling a house for $10,000: what rate of commission was charged?

42. An agent's commission was $50 for selling some land at $125 an acre: how many acres were sold at that price, the commission being reckoned at ½ per cent.? (*Ans.* 80 acres.)

43. An agent sold a consignment of goods for $5,200 and sent $5,096 to his employer: what rate of commission did he charge? (*Ans.* 2 per cent.)

44. An agent sold a consignment of goods, and took $81 as his commission; he used the remainder in buying goods, deducting $79

for his commission. If his rate for selling was the same as his rate for buying, find the rate. (*Ans.* 1¼ per cent.)

45. An agent's rate of commission for selling is ⅘ of his rate for buying. He sold a consignment for $1,421, and after deducting $49 invested the balance. What did he charge for selling?

(*Ans.* 2 per cent.)

46. An agent charges $1 more for selling goods for $100 than for buying for $100. He sold a consignment of pork for $1,734, deducted $85 and invested the remainder in oats. What rate did he charge for investment? (*Ans.* 2 per cent.)

47. An agent charges 50 cents more for selling, than he does for buying, 100 dollars' worth of goods. He sold a consignment for $3,417, deducted $51 and invested the remainder. What rates did he charge? (*Ans.* 1 per cent.; ½ per cent.)

48. A commission merchant sells goods for an employer, and, after deducting his commissions, invests the net amount in other goods. His total commission is $100, receiving $2 more for selling than for buying. If his rate for selling is the same as the rate for buying, what is that rate? (*Ans.* 2 per cent.)

49. An agent received a consignment of wheat, which he sold, charging 2 per cent. commission. With the net proceeds, after deducting his commission at 1½ per cent. and prepaying freight at 25 cents per cwt., he bought sugar at 4¾ cents a pound. The agent's total commission was $72. Find the number of pounds of sugar bought.

(*Ans.* 40,058+lbs.)

50. A commission merchant sold flour on a commission of ½ per cent.; with the net proceeds bought tea on a commission of ⅓ per cent.; the total commission was $50. Find the cost of the tea.

(*Ans.* $5,970.)

51. An agent bought 12,000 bushels of wheat at 80 cents, and charges 1¼ per cent. commission; how much money must his employer remit him? (*Ans.* $9,720.)

52. A commission agent received a consignment of 500 bbls. of apples; he sold at $2.50 per bbl., and after deducting the proper commissions, invested the balance in sugar at 4c. per lb. He charged 2 per cent. commission on sales, and 1½ per cent. on purchases. What was his total commission, and how much sugar did he send to his employer? (*Ans.* $43; 30,172 lbs.)

53. An agent sold on a commission of ½ per cent. a cargo of 1,200 tons of coal at $4.75 per ton; he invested the net proceeds on a commission of 1 per cent. in lumber at $18 per M. How many feet of lumber did he buy? (*Ans.* 311,963 ft.)

54. A broker receives $12,000 to invest in pork, at 4 cents a pound; he charges 2 per cent. commission. How much pork does he buy? (*Ans.* 294,117 lbs.)

55. A merchant sold cotton on a commission of 4 per cent. and invested the net proceeds in sugar at 1½ per cent. commission. The total commission was $220. Find the value of the cotton.

(*Ans.* $4,044.)

Interest.

Interest is the sum charged for the use of money. It is really the use of money, or the benefit derived from its use. The **principal** is the sum for the use of which interest is paid. The **rate** is the per cent. of the principal charged for its use for one year. Accurate interest is reckoned on a basis of 365 days to a year. Sixty-day interest is reckoned on a basis of 30 days to a month. In **counting the days** from one date to another include one of the dates given but not both. Note the following illustrative examples:

1. Find the interest on $240 from Aug. 13 to Dec. 12 at 6 per cent.

From Aug. 13 to Dec. 12

$=18+30+31+30+12=121$ ds.

$(240\times6\times121)\div(100\times365)=\$4.77$. *Ans.*

2. Find the interest at 5 per cent. on a note drawn April 5, at 3 months. Face of note $146 (allow 3ds. grace).

From April 5 to July 5=3 months.

Note due July 8.

From April 5 to July 8

$=25+31+30+8=94$ ds.

$(146\times5\times94)\div(100\times365)=\$1.88$. *Ans.*

There are many short methods of computing interest. For explanations of the best of these we refer you to the department of this book devoted to short-cuts in figures. The student will now solve the following exercises:

56. A man borrows $1,840 at 5 per cent. and loans it immediately at 7½ per cent. What does he gain in nine months?

(*Ans.* $34.50.)

57. A man pays $375 a year rent for a house worth $5,400. Will he gain or lose, and how much in four years, if he borrows money at 7 per cent. to purchase the house? (*Ans. Lose* $12.)

Interest is said to be *simple* when it is reckoned only upon the original principal. *Compound* interest is that which is reckoned for stated periods and added at the end of each period to the principal upon which it was reckoned to make a new principal for the next period. It is as if the original principal had been loaned at simple interest for the first period, then the amount, that is, the original principal and the accrued interest, for the first period loaned for the next period, the second amount loaned for the third period and so on. Thus compound interest reckons interest upon interest. The names *annual, semi-annual, quarterly* and *monthly* interest are applied to interest which is payable at the end of each year, half-year, quarter-year or month as the case may be, throughout the time during which the principal bears interest. Annual or other periodically payable interest differs from simple interest in that it is to be paid at stated intervals while simple interest is not due and collectible until the principal matures. Annual or other periodically payable interest differs from compound interest in that it like simple interest is reckoned on the original principal and on it alone while compound interest is computed for each period on the original principal increased by all accrued interest. In effect, however, periodically paid interest is equivalent to compound interest, for the borrower loses the use of the money he pays as interest at the end of each period and the lender gains the use of it, and the value of this use is assumed to be interest at the rate paid on the principal. Hence, *in calculations concerning periodic payments, the methods, not of simple but of compound interest, should be employed.* For example, it is usual with savings banks which pay quarterly or monthly interest to credit each depositor at the end of every interest period with all interest on his deposit accrued but undrawn, treating such interest as a new deposit, the net result being that the banks pay compound interest. If interest which is by agreement to be paid at specified intervals, is not so paid, and the lender has to collect it by process of law, the courts have authority to grant at their discretion simple interest on the accrued periodic interest. The interest upon interest, if thus granted, is styled *damages* and its maximum rate is the *legal rate* of six per cent. per annum. The *present worth* of a sum due at some future time is in commercial calculations the amount due less the in-

terest for the time between the present and the date of maturity. The following exercises should be solved by the student:

58. Find the interest on $176.40 for 126 days at 5½ per cent. (*Ans.* $3.35.)

59. The interest on $250 for 6 months at a certain rate, together with the interest on $450 for 1½ years at ¾ of that rate, is $25 25; find the rates. (*Ans.* 4 and 3 per cent.)

60. Find the amount of $100 in 2 years at 4 per cent. (*Ans.* $108.)

61. What sum amounts to $540 in 2 years at 4 per cent.? (*Ans.* $500.)

62. Find the sum which in 6 months, at 5 per cent., amounts to $820. (*Ans.* $800.)

63 What sum deposited in a bank now at 4 per cent. will, in 9 months, amount to $1,339? (*Ans.* $1,300.)

64. What sum deposited at 6 per cent. will in 219 days, amount to enough to pay the taxes on a building worth $50,000, taxed at 15 mills on the dollar? (*Ans.* $723.94.)

65. A man has an offer of $1,500 cash, or $1,650 in 9 months; which is the better offer, money being worth 8 per cent. per annum? (*Ans.* The latter.)

66. $250 amounts to $275 in a certain time. What sum will amount to $275 in one-half of the time? (*Ans.* $261.90.)

67. A person borrowed money for 3½ years at 8 per cent., and repaid principal and interest with $320. How much was borrowed? (*Ans.* $250.)

68. A person borrowed money for two years. For the first year he paid 5 per cent., and the second year 6 per cent. At the end of the time he paid back $166. How much was borrowed? (*Ans.* $149.55.)

69. "To find the interest on a sum of money at 6 per cent., multiply the sum by one-half of the number of months, and remove the decimal point two places to the left." Explain the rule.

70. A offers for a house $2,180, payable at the end of 3 years; B offers $455 cash and $455 at the end of each year for 3 years; C offers $1,600 cash. Which of these is the best offer, money being worth 8⅓ per cent.? (*Ans.* A's offer.)

71. If I borrow $1,200 for 3 years at 5 per cent., with the understanding that the interest due at the end of each year shall form part of the principal for the next year, how much shall I have to pay at the end of the 3 years? (*Ans.* $1,389.15.)

72. A man engaged in business was making 15 per cent each year on his capital of $15,000; he gave up his business at a sacrifice of 10 per cent. of his capital, and loaned his money at 8 per cent.; what amount of income did he lose yearly? (*Ans.* $1,170.)

In *compound* interest the interest is said to be compounded annually, semi-annually, quarterly, etc., according as the addition of the interest to the principal every year, half-year, quarter-year, etc. In stating the rate of interest, one year is taken as the unit of time but it is not expressed, and the rate is reduced to an annual rate as if it were for simple interest. Thus 4 per cent. compounded semi-annually does not mean 4 per cent. per half-year but 2 per cent. per six months, the full phrase being,—"4 per cent. per annum but compounded semi-annually." A rate expressed in this way as if it were a simple interest rate is called a **nominal rate** to distinguish it from the actual or effective rate. A nominal rate of 6 per cent. compounded quarterly is an actual rate of 1½ per cent. per quarter-year, and a nominal rate of 12 per cent. compounded monthly is an actual rate of 1 per cent. per month. Notice the following illustration:

Example.—If $1,250 deposited in a savings bank, draw interest at 4 per cent. payable semi-annually, the interest accrued and due at the end of the first half-year will be .02 of $1,250 which is $25.00. If this $25.00 be not drawn it will be placed to the credit of the depositor, making his deposit $1,275.

The interest for the second half-year will be computed on the increased deposit and will therefor be .02 of $1,275 which is $25.50. If this $25.50 be not drawn it will be placed to the credit of the depositor, making his deposit $1,300.50 at the beginning of the third period of six months.

The interest for the third half-year will be computed on the $1,300.50 deposit and will therefore be .02 of $1,300.50 which is $26.01. This sum, if it be not drawn, will be added to the $1,300.50 making a total of $1,326.51 at the credit of the depositor at the end of 18 months.

Thus $1,250 at 4 per cent. interest compounded semi-annually will

in a year and a half amount to $1,326.51; and the compound interest at the specified rate and for the stated time will be $1,326.51–$1,250= $76.51.

Computation. $1250 =original amount or principal.
1.02=*rate* of increase in amount.

25.00
1250

$1275 =amount at end of 1st period.
1.02

25.50
1275

$1300.50=amount at end of 2d period.
1.02

26.0100
1300.50

$1326.51=amount at end of 3d period.

Thus it will be seen that the amount of one dollar for the three periods is equal to 1.02 raised to the third power or 1.02×1.02×1.02 which is 1.061208. This multiplied by 1250 will give $1,326.51. Solve the following exercises:

73. Find the compound interest on $150 in 4 years at 5 per cent., interest compounded yearly. (*Ans.* $32.33.)

74. Find the compound interest on $875.25 in 3 years at 4 per cent., interest compounded yearly. (*Ans.* $109.29.)

75. What is the difference between the simple and the compound interest on $1,275 for 3 years at 5 per cent., compounded yearly? (*Ans.* $9.72.)

76. Find the interest on $1,200 in 2 years at 6 per cent., interest compounded half yearly. (*Ans.* $150.61.)

77. Find the compound interest on $1,000 for 2 years and 3 months, at 8 per cent., interest compounded quarterly.

78. If, at the age of 25 years, a person places $1,000 on interest compounded annually at 6 per cent., what be due him when he is 50 years old? (The 25th power of 1.06 is 4.2919.)

Taxes and Duties.

The subject of taxes and duties is fully discussed in another department of this book. *Taxes* are sums of money assessed on persons, property, or incomes, to defray the expenses of a country or of a corporation. A *license* is a written permit to conduct a certain business. *Duties* or customs are taxes levied by the government on goods im-

ported from foreign countries. Some duties are levied according to the weight of the article, and others according to the value. *Tare* is an allowance made for boxes or waste. The following exercises will aid students in understanding the subject:

79. The New York City tax rate for a particular year is quoted at $18.50. What will the taxes on a house assessed for $9,000 amount to? (*Ans.* $166.50.)

80. A city is assessed for $350,000,000. The yearly expenses are estimated at $4,500,000. What will be the tax rate?

(*Ans.* $12.85.)

81. The assessed value of real estate in a town is $986,000 and of personal property $450,000. The sum to be raised is $12,145.63 net, after allowing 2 per cent. for collection. What should be the rate of taxation if the number of polls be 375 at 50 cents each?

(*Ans.* $8.50.)

82. A town needs $120,000. The assessed valuation is $13,240,000. Allowing 2 per cent. for uncollectible taxes and 1 per cent. for expense of collection, find the tax rate per M. (*Ans.* $9.34.)

83. A man's taxes amount to $155.70. The rate is 17.3. Property is assessed at ⅔ its market value. What is his property worth?

(*Ans.* $13,500.)

84. Find the duty on six gross, pint-bottles, cologne water from France, invoiced at one-half franc per bottle. Tare 2 per cent. Duty $2 per gal. and 50 per cent. ad valorem. (Franc = 19½ c.)

85. Find the duty on 6,495 lbs. cotton seed oil. Duty 10c. a gal. of 7½ lbs. weight.

86. Find the duty on an invoice of lumber from Brazil: 5,600 boards rosewood, each 16 ft. long, 9 inches wide, and 2 inches thick. Duty $2 per M.

87. Find the duty on an invoice of cigars from Havana. Weight 3,600 lbs. Tare 5 per cent. Invoiced at $2,670 less 5 per cent. Duty $4 per lb. and 25 per cent. ad valorem.

Stocks and Bonds.

The student will find very complete explanatory notes on this subject in the chapter on *securities*. *Stocks* are bought and sold just as is merchandise or produce. The brokers charge a commission of ⅛ per cent. for buying and ⅛ per cent. for selling; that is, 12½c. on each $100 share no matter what the buying price or the selling price. If a

bond bears interest, at 5 per cent. for instance, the interest is always reckoned on the par value and not on the market value. If one could buy a 5 per cent. bond at 80, one would receive $5 interest on each $80 invested, or 6¼ per cent. interest. The following exercises will aid the student in a more thorough understanding of the subject:

88. If I buy 3½ per cent. government bonds at 113⅓ what rate of interest do I receive? (*Ans.* 3.088 per cent.)

89. What amount of stock must be sold at 82¼ through a broker to produce $19,710? (*Ans.* $24,000.)

90. At what rate should stock paying an annual dividend of 12 per cent. be bought to realize 7½ per cent. on investment?

(*Ans.* 160.)

91. A man bought 268 shares at 3⅜ per cent. discount and sold them at 1⅞ per cent. premium. Brokerage ⅛ in each instance. Find his gain. (*Ans.* $1,340.)

92. Stock is originally bought at 37½. It is doubled by *watering* three times. It now pays a quarterly dividend of 4½ per cent. What per cent. does it pay on the original investment?

(*Ans.* 384 per cent.)

93. I wish an income of $1,620. I invest in U. S. bonds at 4½ selling at 102. How much should I invest? (*Ans.* $36,720.)

94. I bought 720 shares railway stock at 71⅛, through a broker, on a margin of 10 per cent. and sold at 74½. What per cent. profit did I make on actual investment? (*Ans.* 44 per cent., nearly.)

95. At what price must 3½ per cent. bonds be bought to net 4 per cent. interest? (*Ans.* 87½.)

96. Sold through a broker 1,500 shares ($100) of Jersey Central R. R. stock at 121½, brokerage ⅛ per cent. What were the net proceeds of the sale? (*Ans.* $182,062.50.)

97. Bought through a broker 1,600 shares ($100) St. Paul R. R. stock at 69¼, brokerage ⅛ per cent. What was the gross cost of the stock? (*Ans.* $111,000.)

98. A speculator bought 36,500 shares ($100) Reading R. R. stock at 39¾ and sold them at 40⅜. What was his gain on the transaction? (*Ans.* $22,812.50.)

99. A man bought through a broker 1,900 shares ($100) Canada

Southern R. R. stock at 54¾ and sold them at 55⅜. What was his net profit on the transaction, brokerage each way ⅛ per cent.?
(*Ans.* $712.50.)

100. A man bought through a broker 7,600 shares ($100) of Lake Shore R. R. stock at 107⅝ and sold 2,400 shares at 107¾ and the remainder at 107⅛. What was the amount of his losses on the transactions, brokerage being ⅛ per cent. each way? (*Ans.* $4,200.)

101. A bank declared a dividend of 3½ per cent. How much should a stockholder owning 120 shares ($50) receive? (*Ans.* $210.)

102. An insurance company declared a dividend of 6 per cent. What rate is that on the market value of the shares which are at 185?
(*Ans.* 3.24 per cent.)

103. Sold 37 shares ($25) B. and L. Association stock, receiving therefor $1,019.81. At what rate was the stock sold?
(*Ans.* 110¼.)

104. Bought through a broker 750 shares ($50) in the Farmers' Loan and Saving Society paying therefor $43,968.75. At what quotation were they bought, brokerage ⅛ per cent.? (*Ans.* 117⅜.)

105. Bought stock at 197⅝ and sold it at 194⅞, having meanwhile received a dividend of 6 per cent. on it. My net gain by the transaction after paying ⅛ per cent. brokerage each way, is $336. How many shares ($40) did I buy? (*Ans.* 280.)

106. A man received $495 as dividend at 4½ per cent. on his bank stock. He sold 40 shares ($100) at 143¼ and the remainder at 144¼, paying ⅛ per cent. brokerage. What were the net proceeds of the sale? (*Ans.* $15,813.75).

107. A capitalist had $20,000 to invest. He purchased $8,700, par value, of Canadian 4 per cent. bonds at 103 and $7,300, par value, of Canadian 3½ per cent. bonds at 93½ and invested the balance as far as he could in bank stock (shares $100) at 149¼, paying half-yearly dividends of 4 per cent. each. What was his annual income from these investments? (*Ans.* $827.50.)

108. The difference between the annual income derived from a certain sum invested in 7 per cent. stock at 150 and that from an equal sum invested in 9 per cent. stock at 202½, is $40. What is the amount invested in the 7 per cent. stock. (*Ans.* $18,000.)

109. A shareholder receives a dividend of 6 per cent. on his stock and pays thereon an income-tax of 16⅔ mills on the dollar. Next

year he receives a dividend of 6½ per cent. and pays an income-tax of 12½ mills on the dollar. He finds that his income is $830 more in the latter year than it was in the former. How much stock does he hold? (*Ans.* $160,000.)

110. A man invests a certain sum in 3 per cent. stock at 90 and an equal sum in 4 per cent. at 95. Each stock rises 5 per cent. in price; the investor then sells out and invests the proceeds of each stock in the other. The stocks fall to their former value and he again sells out at a loss of $3,514.75 on the amount realized on his former sales. Find the sum he originally invested. (*Ans.* $32,490.)

Partnership.

A *partnership* is a voluntary association of two or more persons who combine their money, goods or other property, their labor or skill, any or all of these, for the transaction of business or the joint prosecution of any occupation or calling, upon an agreement that all gains and losses shall be shared in certain specified proportions among the persons constituting the partnership. The division of gains and settlement of partnership interests depend upon the terms of the partnership and are widely different in different cases. Note the following exercises:

111. A and B are partners. A invests $2,800. B invests $7,200. Divide a gain of $5,000. (*Ans.* A, $1,400; B, $3,600.)

112. A and B are partners. A invests $4,000 and at end of 4 mo. B joins him with $5,000 more. At the end of 15 mo. they sell out for $12,000. Divide the money. (*Ans.* A, $6,260.87; B, $5,739.13.)

113. A, B and C are partners. A invests two-fifths of the capital, B one-third, and C the remainder. A's services are worth twice as much as B's and B's are worth three times as much as C's. Divide a gain of $11,000 in proportion to investment and ability.

(*Ans.* A, $7,200; B, $3,000; C, $800.)

114. A and B are partners. A owns the property valued at $5,000 and the building and plant valued at $12,000. B invests cash $13,000. They draw salaries for five years then A decides to buy B's interest. The property is worth $18,000 and the building and plant, $7,000. They have other net resources valued at $25,000. If the gain is to be divided according to investment how much should A pay B?

(*Ans.* $21,666.67.)

115. A, B and C rent a pasture for which they pay $54. A puts

in 4 cows for 8 weeks, B 6 cows for 6 weeks, and C 8 cows for 5 weeks. How much of the rent should each pay?

(*Ans.* A, $16; B, $18; C, $20.)

116. R. Stuart and G. Armstrong enter into partnership and agree to share all gains and losses in proportion to their investments. Stuart contributes $4,500 to the partnership and Armstrong contributes $7,500. Their net gain at the end of the year is $1,750. How much of this sum should each partner receive? (*Ans.* $656.25; $1,093.75)

117. Three partners invest respectively $7,800, $5,750 and $9,450 in business. At the end of the first year they find their net gain to be $3,156. What is the amount of each partner's share of this gain?

(*Ans.* A, $1,070.30.)

118. Two contractors, G. Rose and W. Crerar, undertake to build a bridge for the sum of $31,500. Crerar supplies the material at a cost of $11,727 and Rose pays the wages of the mechanics and laborers and all other expenses connected with the contract, amounting altogether to $15,645.80. If the profit on the contract is to be divided in proportion to investment, how much of the $31,500 should each partner receive? (*Ans.* Rose, $18,004.83.)

119. A. Jones and D. Smith enter into partnership, the former investing $13,500 and the latter investing $22,800, and they agree that Jones shall receive a salary of $2,000 a year for managing the business, and that all gains over and above this sum and all losses shall be shared in proportion to their respective investments. At the end of a year their resources are $74,850 and their liabilities are $17,943.86. Find the amount of the interest of each partner at the end of the year.

(*Ans.* Jones, $20,419.64.)

120. Th. Sinclair, C. Harvey and H. Stevens enter into partnership, Sinclair investing $37,500, Harvey $28,600, and Stevens $24,000, and they agree to share all gains and all losses in proportion to their investments. At the end of the year the resources of the firm are $124,368.50 and the liabilities are $37,429.50. Stevens now wishes to withdraw from the firm and sells to his partners his interest in the business in shares proportional to their interests in it. How much should he receive from each? (*Ans.* $13,138.05; $10,019.95.)

121. T. Allan and E. Jamieson engage in business with a joint capital of $19,200 and agree to share gains and losses in proportion to their investments. At the end of a year Allan receives a dividend of

$1,100 and Jamieson a dividend of $1,300. What was the amount of the investment of each? (*Ans.* Allan, $8,800.)

122. A, B and C enter into partnership and agree to share gains and losses in proportion to their investments. A invests $6,000 and B invests $8,000. They gain $1,800 of which C's share is $792. Required A's and B's gains. (*Ans.* A, $432; B, $576.)

Miscellaneous Problems.

The collection of exercises given below have been selected from examination papers sent graduating classes in large commercial and industrial institutions:

123. A man invested $2,400 in a publishing business, and at the end of 2½ years he withdrew $2,940, being investment and profits. What annual rate of interest did his investment pay?

124. A note of $730, drawing interest at 7 per cent., dated August 3, at three months, is discounted September 15th at a bank at 6 per cent.; find the proceeds.

125. A tradesman marks his goods with two prices, one for ready money and the other for a credit of six months. What fraction of the credit prices should the cost prices be, allowing 5 per cent. simple interest?

126. A gentleman wishes to invest in U. S. bonds at 4½, selling at 102, so as to provide a permanent annual income of $1,620 for his invalid son. How much should he invest?

127. How much exchange on London at 4.81¾ will $821.99 buy?

128. A jobber bought a bankrupt stock at 34½ cents on the dollar and retailed it at 10 per cent. above the original wholesale prices. His expenses were 5 per cent. of the total sum of money received Find his gain per cent. on the goods.

129. A, B and C are partners. A puts into the concern $6,000 but withdraws half of it at the end of 6 months; B puts in $4,000, and adds $1,000 to it at the end of 4 months; C puts in $5,000 for the whole year. The gain during the year is $5,100. What is each one's share?

130. A merchant buys goods at a discount of 40 per cent. and 20 per cent. from the list prices, and sells at a discount of 10 per cent. and 5 per cent. from the list prices. What is his gain per cent. allowing 10 per cent. of his sales for bad debts?

131. How many pounds of coffee, at 24 cents, must a merchant mix with 6 pounds, at 36 cents, that he may sell the mixture at 40 cents and gain 33⅓ per cent.?

132. How many cubical blocks ¼ of an inch on each edge can be put into a case, the inside measurements of which are 18 inches by 10 inches, and 6 inches deep?

133. What should be the catalogue price of a piano which cost $300 to manufacture, so that the manufacturer can allow a discount of 40 and 10 to the dealer, and still make 62 per cent.?

134. Wm. Brown borrows $720 from H. Smith, and gives in return a 3 months' note dated March 3, 1893, drawing interest at 6 per cent. Brown cannot pay this note when it falls due. He therefore (on the third day of grace) gives Smith a new note for the full amount including the interest then due. The new note reads 90 days after date.

1. When does the second note mature (3 days grace)?
2. What is the full amount due at maturity?

135. You owe an English merchant a bill of £124 10s. 6d. How much in American money will you have to pay for a foreign draft large enough to cover the account with $1.50 additional for banker's commission? Exchange $4.87.

136. If 7½ tons of sulphur are required to make 62½ tons of gunpowder, what per cent. of powder is sulphur?

137. A note for $200, drawing interest at 6 per cent., given June 22, at 90 days, is discounted at a bank July 15, at 7 per cent.; find the proceeds.

138. A dealer buys at 33⅓, 10 and ½ off list prices, and sells at list prices: what per cent. profit does he make?

139. The leaves of a 16-page pamphlet are about 7 by 12. Find the cost of enough 60-pound paper, 24 by 28, to print 5,000 pamphlets, the paper costing 6½ cents a pound.

140. A note for $3,600 drawn March 4, 1894, at three months with interest at 7½ per cent. is discounted at a bank April 11, at 7 per cent.: find the proceeds.

141. When gold is quoted at 107½ what is the value in gold of $3,440 in currency.

142. The duty on a certain kind of dry goods is 12½c. a square yard and 30 per cent. ad valorem. A of Philadelphia, orders 7,600

yards through B of New York, who charges 2¼ per cent. commission on the gross, Paris invoice. C of Paris, sells the goods at 5½ francs per yard, adding 12 francs for packing and 10 francs for consul's fee. The freight to Philadelphia is $147.50. The invoice is sent to B, who adds his commission and forwards to A. The customs appraiser allows 420 yards tare on account of a damaged case. Considering a franc worth 19 cents, at how much per yard must A sell the goods to gain 33⅓ per cent.?

143. X, Y and Z formed a partnership to carry on a milling business. X owns the site, valued at $2,500; Y puts up the building costing $4,800; and Z puts in the machinery costing $3,000. They ran the mill for one year, dividing the profit on the basis of investment and then agreed to take equal shares in it, but meantime the value of the land had increased 30 per cent., the value of the building had decreased 5 per cent., and the value of the machinery had depreciated 20 per cent. Who should pay the other and how much?

144. Find the largest number of packages, each 4¼ in. by 4 in. by 2½ in., which can be packed in a case the inside measurements of which are 4 ft. 11¾ in. long, 3 ft. wide, and 4 ft. deep.

145. Find the difference between the simple and compound interest of $3,600 for 1½ years at 5 per cent. per annum, if the compound interest is compounded half-yearly.

146. My savings bank allows 3 per cent. interest, payable quarterly. On January 17, 1894, I deposited $250; on March 3, $50; on April 13, $75; on September 20, $100; on December 18, $85.45. I withdrew $125 on July 3, and $37.50 on August 15. How much money should be due me February 1, 1895?

147. A book jobber buys books at 30 and 20 off list prices. He marks his stock at an advance of 10 per cent. on list prices. He makes a large sale to a public library at a discount of 12½ per cent. from his marked prices, and makes a net profit of $2,012.50. How much did the books cost him?

148. Find the proceeds of a note for $3,250 drawn May 7, at 6 months, and discounted July 13, at 7½ per cent.

149. On goods invoiced at £244, 14s. 9d., the duty is 15 per cent.; on another invoice of £19, 18s. 4d., the duty is 20 per cent.; on another invoice of £93, 17s. 9d., the duty is 40 per cent. Find the entire duty in United States currency, exchanged at $4.87½.

150. A and B are partners. A's capital is double B's. B's services are worth three times as much as A's. At end of year A's account shows:

Money drawn, $3,200.
Money loaned B, $500.
Money loaned the business, $1,200.

B's account shows:

Money drawn, $720.
Money borrowed from A, $500.
Money borrowed from the business, $100

They gain $10,000 and their present worth, exclusive of gain, is $120,000. How much money should A pay B for his interest as it stands?

INTRODUCTION.

Business Geography is the description of the Earth's surface, with special reference to the discovery, production, manufacture, transport and exchange of useful or desirable things. It is geography applied to the purposes of commerce; and it describes the Earth in such a way as to bring into prominence everything which enables people to turn natural conditions to practical account. Two entirely different kinds of preliminary study are necessary in order to understand the principles of Business Geography. These are physiography and economics.

Physiography, which includes the description of commodities as they exist naturally, their distribution over the world, the various natural conditions, such as climate and weather, that facilitate or hinder their transport, the mechanical contrivances that apply natural agencies to their manufacture or improvement. This gives an inventory of the world and its contents viewed as a vast workshop at rest, and without workmen, but containing the raw materials, machinery, and power all ready for use.

Economics, or the principles of exchanging commodities, the use of money, the laws of supply and demand, the forms of government, and the regulations for the conduct of trade between nations. This describes the rules which the workers in the great world-workshop must accept, if the various divisions are to work harmoniously and to the best result.

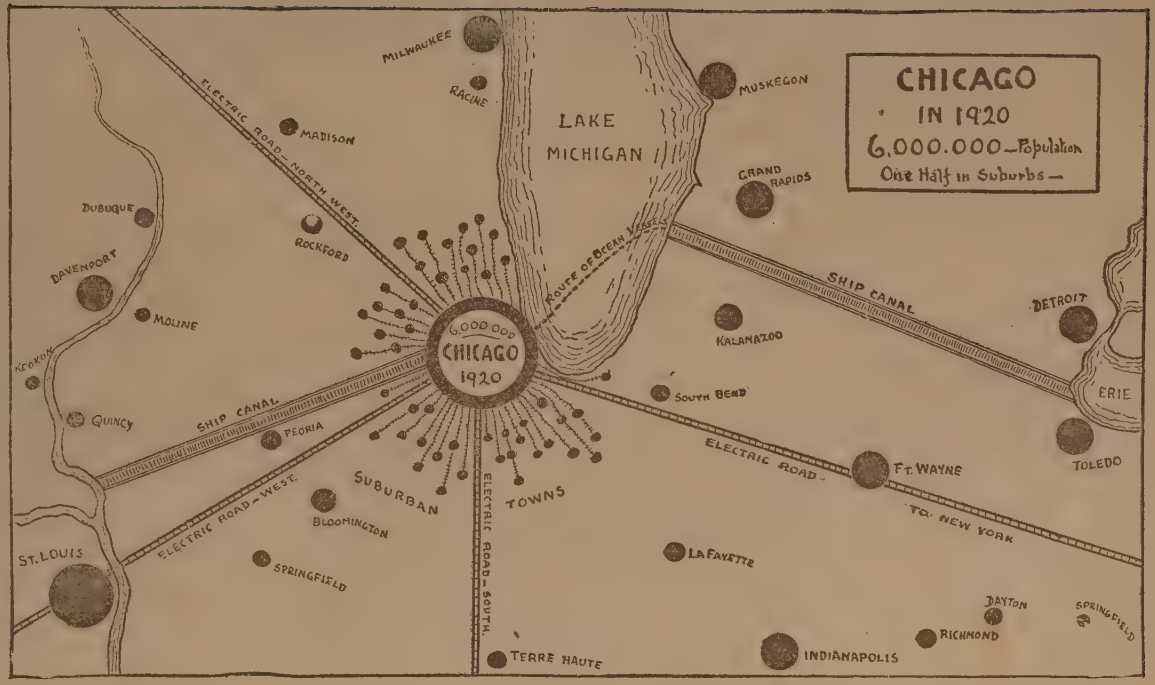
Then *Business Geography*, or the description of the world in its relation to man as a *trader*, can be really understood. It describes and explains the natural divisions and artificial bound-

aries of countries, the distribution of population, towns with their special industries, and the laws, manners and customs of the people. In fact it pictures the actual condition of the world-work-shop, showing what stores of *raw material* are being utilized, the amount of work done in each part, and the way in which the different workmen act, either following, neglecting or transgressing the rules of the establishment.

While it is possible to pick up enough knowledge of the two branches of preliminary study by paying attention to the facts of Business Geography as they are described for each country, it is absolutely necessary to possess a sound groundwork of general geography, and to go through the drudgery of learning the exact position of countries, with their boundaries, and the positions and distances apart of the chief towns. Maps must be thoroughly understood, and the student of geography should learn to read a map as readily as a book.

NATURAL CONDITIONS.

Natural Conditions. The features which give a region commercial importance are its position, configuration, climate, natural resources and people. A country which by its **position** is easily accessible from all parts of the inhabited world, which has numerous inlets of the coast to form harbors, and is placed beyond the fear of invasion by natural barriers is well adapted for commerce. Switzerland is protected from enemies by its mountains, Russia is opened up to commerce by its vast system of navigable rivers and canals; but the former cannot compete with sea-coast states in commerce, and the latter has thousands of miles of flat land frontier bounding, neighboring and possibly hostile countries, and is not secure from invasion. The **configuration** of a country, *i. e.* the form and arrangement of its mountains, valleys, high and low lands, determines the size and directions of its rivers, and the value of its soil for cultivation. It also fixes the main lines of communication along which roads or railways may be made. **Climate** depends on position and configuration. Temperature of the air is subject to greater extremes and the rainfall is less in the heart of a continent than near the sea.


CHICAGO
IN 1920
6,000,000—Population
One Half in Suburbs—
LAKE MICHIGAN
MILWAUKEE
RACINE
MADISON
ELECTRIC ROAD—NORTH WEST
MUSKEGON
GRAND RAPIDS
ROUTE OF OCEAN VESSELS
SHIP CANAL
DETROIT
ERIE
TOLEDO
DUBUQUE
ROCKFORD
DAVENPORT
MOLINE
KEOKUK
QUINCY
SHIP CANAL
PEORIA
6,000,000
CHICAGO
1920
KALAMAZOO
SOUTH BEND
ELECTRIC ROAD
FT. WAYNE
TO NEW YORK
SUBURBAN TOWNS
ELECTRIC ROAD—WEST
BLOOMINGTON
ST. LOUIS
SPRINGFIELD
ELECTRIC ROAD—SOUTH
LAFAYETTE
DAYTON
SPRINGFIELD
RICHMOND
TERRE HAUTE
INDIANAPOLIS

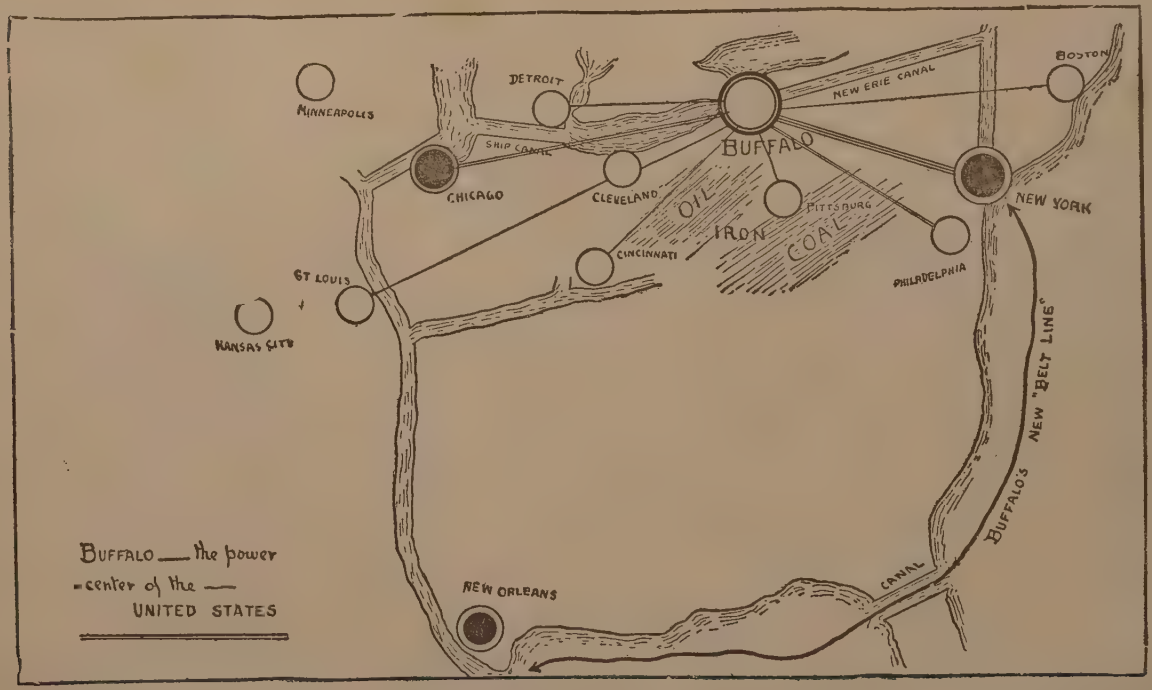
NATURAL RESOURCES.

The natural resources of a country are mainly the mineral commodities and agricultural produce that it yields. With the constant demand for machinery and fuel, the possession of coal and iron secures the commercial success of any region. A discovery of gold, silver or diamonds often brings a rush of people to a barren and difficultly accessible district: while the precious deposits last railways are made, the soil is improved for agriculture, towns are built; and when the supply is exhausted the result may be a self-supporting settlement permanently established and in full communication with the world. The position and industries of towns are usually fixed by the existence of natural resources or of natural lines of communication, but the most powerful agent is the personal energy of enterprising and persevering men, who by superior education, or scientific knowledge, or practical foresight, have often been able to found towns and industries in situations which no theoretical considerations would suggest or explain.

COMMERCE.

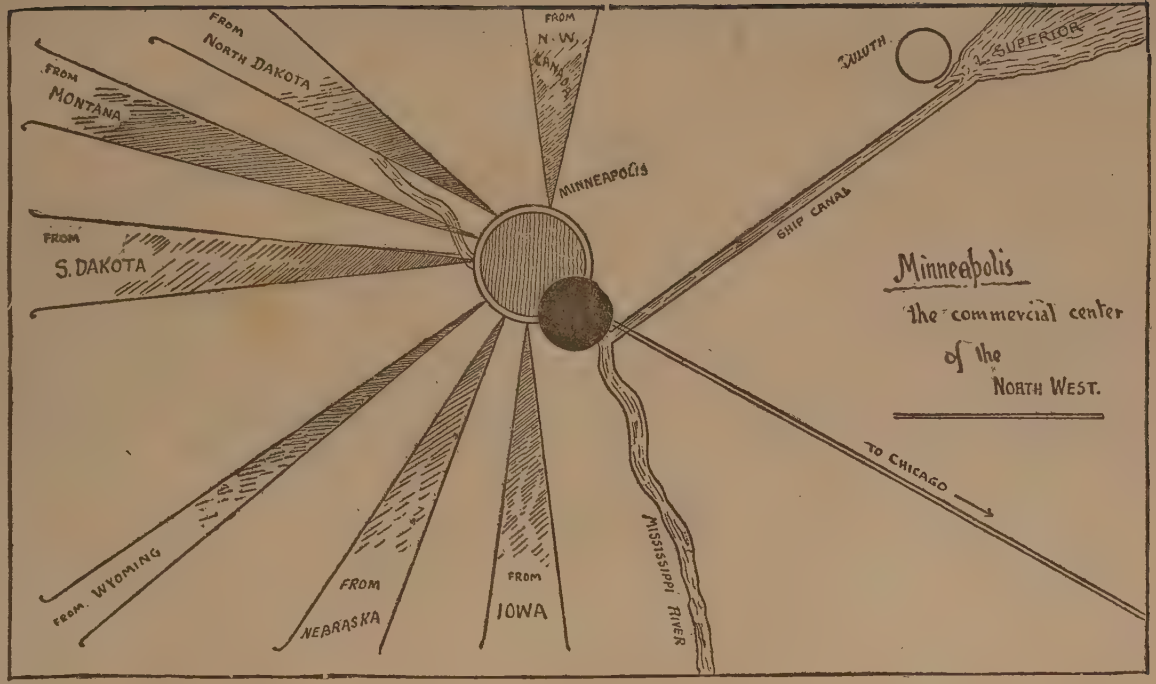
Commerce arises from the division of labor among men, and the difference in the productions of various parts of the Earth. In its simplest form, that of barter, one man spends his time in collecting or making a quantity of some one necessary thing; he keeps as much as he wants for himself, and takes the rest to another person who has occupied his time in collecting or making something else equally necessary; the two exchange their surplus commodities and each gains an equal advantage.

Money. As society became more complex it was convenient to have some symbol of value that could be easily kept and carried, and would be readily accepted in exchange for anything useful. This symbol of value in different countries takes the form of cowrie shells, kola nuts, mats, cloth, brass wire, bricks of tea, or metal coins; in all civilized countries it is now either gold or silver, all values being reckoned in terms of these metals. In commerce it is often convenient to make use of written or


MINNEAPOLIS
DETROIT
NEW ERIE CANAL
BOSTON
SHIP CANAL
BUFFALO
CHICAGO
CLEVELAND
OIL
PITTSBURG
IRON
COAL
NEW YORK
CINCINNATI
PHILADELPHIA
ST LOUIS
KANSAS CITY
BUFFALO'S NEW "BELT LINE"
CANAL
NEW ORLEANS
BUFFALO — the power
center of the —
UNITED STATES

printed promises to pay (bills or bank-notes) instead of money. In primitive society each man caught or cultivated all he required for living, unless he took it from some weaker person who had done so. As civilization progresses, robbery is not allowed, the number of desirable things increases rapidly, and it becomes necessary to seek for commodities in far-off lands and carry them long distances. Ingenuity strengthened by exercise invents new means of manufacture and communication; and advantage is taken of natural phenomena like the trade winds, or contrivance like the steam-engine, in order to give increased speed and security. Laws are framed and treaties made to regulate conduct in matters where the wishes of one man or state might otherwise lead to actions hurtful to the community or to other countries.

Trade. The current of trade naturally tends to flow from places where there is an abundant **supply** of any commodity to those where there is a lack and a **demand**. Thus more wheat is grown in America than can be eaten, more must be eaten in Britain than can be grown, so wheat-ships are always crossing the Atlantic from west to east. The amount of trade in any commodity may be measured in two ways, either by taking account of the *quantity* or of the *value* which changes hands. The *natural barriers* to the flow of trade, such as seas and mountains, have been successfully overcome; but *artificial barriers* of a much more serious kind exist in the shape of **tariffs**. In England, for instance, the **free trade** system prevails; with a few exceptions all goods are allowed to enter or leave the country wherever they come from and wherever they go to, without charge. Most continental nations, the United States and British colonies follow the older system of **protection.** The protective tariff is a tax, often calculated not on the quantity but on the value (*ad valorem*) of the imports, levied on all foreign commodities which might have been produced in the country. Under it manufacturers are generally allowed to import raw material free of duty, but the public must pay dearly for the manufactures, as the cheaper imported goods are raised to even a higher price than the home productions by the tax. The **prohibitive** system consists in absolutely preventing the import or


FROM
NORTH DAKOTA
FROM
MONTANA
FROM
S. DAKOTA
FROM
WYOMING
FROM
NEBRASKA
FROM
IOWA
FROM
N. W.
MINNEAPOLIS
DULUTH
SUPERIOR
SHIP CANAL
TO CHICAGO
MISSISSIPPI RIVER
Minneapolis
the commercial center
of the
North West.

export of certain commodities, but although once common it is now rarely applied on a large scale, except in the case of certain parts of Africa and the Pacific islands where international agreements prohibit the sale to natives of alcoholic drink and explosives.

TRADE RESTRICTIONS.

Trade restrictions. Besides the ever-varying tariff systems of the world, trade is subject to a variety of minor restrictions. Most governments have certain **monopolies** such as letter-carrying, railways, tobacco or opium growing, with which private firms are not allowed to compete. The most powerful manufacturers in special industries sometimes combine to form a **syndicate** to buy all of a certain commodity in the world and so keep up the price; or they may for a time reduce the production of commodities until the demand becomes keener and prices rise. Workmen on the other hand may institute **strikes** in order to get higher wages or to work fewer hours. All these things disturb the normal course of trade, but **war** is a far more disastrous and less rational hindrance than any. The world is now so interwoven with the bonds of commerce that the result of a rupture anywhere disorganizes the whole. In the American civil war the cotton-spinners of Lancashire suffered for a time as much as the cotton growers of Georgia. Even in time of peace there are great inconveniences from this cause. The state railways of Europe are liable on rumor of war to be closed to commerce; towns must be fortified, hindering their natural growth; in most countries every young man must give up several years to military service; and to maintain the army and defences heavy taxation is necessary which reduces the national wealth and contracts trade.

MINERAL COMMODITIES.

Mineral Commodities are those which occur in the substance of the Earth itself or on the surface of the ground, and have not been recently produced by the action of life. Although the world is composed of more than 60 different kinds of matter or

elements, only about 10 or 15 of them, either pure or combined together in various ways by twos or threes, are of practical use. All commodities are obtained within a mile of the surface of the ground; mines become warmer so rapidly as they go deeper that if they could be sunk to a depth of about two miles the air would be as hot as boiling water. The deepest boring yet made in the Earth's crust is 5834 feet or 1 mile, attained in search of coal near Merseburg in Saxony.

The different kinds of rocks formed during the ages of the past have been laid down in great sheets one over another in orderly succession. The crust of the Earth is, however, always rising slowly in some places, and sinking in others, while wind, rain, ice, running water, and waves are continually grinding down and carrying away the land, and gradually forming new rocks in lakes and seas. The coal measures, for instance, were originally spread like a sheet over great tracts of older rocks, and then covered deeply by newer deposits, so that they could never be reached by human power. A valley is sometimes cut out by a river through the successive layers of rock, which can then be reached on both sides of the gorge. By studying the order of the changes which the Earth's surface undergoes, and the nature of the surrounding country, a geologist is able to tell where valuable deposits are likely to be found, and where it would only be waste of money to look for them.

Metals are sometimes found in the pure or native state, but more often in combination with sulphur, oxygen or carbonic acid. **Gold** is one of the few usually found pure. It almost always occurs embedded in the quartz which fills up veins or crack in the more ancient rocks, and it has been found in all parts of the world.

Gold may be extracted by mining the quartz veins, or "reefs," then crushing the mass into small pieces by means of a stamping "battery," and washing away the lighter quartz by a stream of water which leaves the heavier gold behind; but it is usually more economical to use chemicals such as cyanide of potassium, chlorine solution, or metallic mercury to dissolve out the gold. Rivers running over gold-bearing rocks wear them down into gravel which yields large supplies of gold by simply washing

away the lighter stones. The hardened masses of old river-drift which occur in some of the American canons are quarried by "hydraulicking" or washing away the cliff by a stream of water at high pressure from a pipe like an enormous fire-hose. The chief gold mines of Europe are in the Ural Mountains and in the Transylvanian Alps. Gold fields recently opened up in many parts of South Africa, have led to the extension of organized government over the whole region from the Limpopo river to the Zambesi, and to the establishment of several prosperous towns.

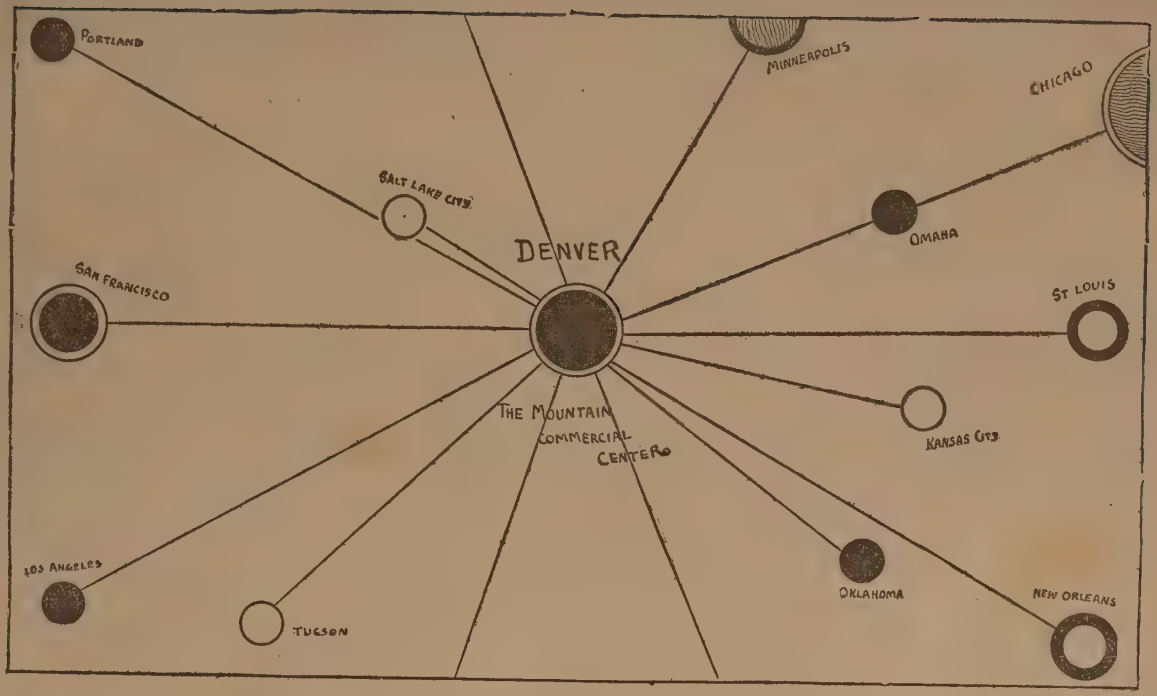
Silver is rarely found pure; it occurs most often in the state of ore combined with other elements, such as sulphur and chlorine, and often with compounds of lead. It is usually mined from veins in solid rock, and the metal must be separated from the ore by chemical processes. The most important silver mines are in the western United States, along the Pacific slope of the Andes in South America, and in the extreme south-west of New South Wales in Australia.

For the last fifty years silver has been growing cheaper than gold when measured by the amount of other commodities that has to be given for it. In 1840 the value of gold was 16 times that of silver, in 1889 it had increased to 22 times. This fact is spoken of as the **depreciation of silver.**

Mercury, or *quicksilver*, a liquid metal, carried in cast-iron bottles and used in extracting gold, is produced in few places; the historic Spanish mines of Almaden yield about half the supply of the world, those of New Almaden in California about one quarter, while Austria and Italy supply the rest. Up to 1883 the California output was the greatest.

Iron is found everywhere, and there are many kinds of ore. *Magnetic ore*, the richest and purest form, is a compound of iron and oxygen; *Red* and *Brown Hematite* are also oxides but less rich in metal; *Spathic ore*, *Clay-band and Black-band Ironstone* are compounds of iron and carbonic acid. Clay-band and black-band ironstone are the commonest British ores; but hematite is the purest, and best adapted for steel-making.

Formerly when charcoal was used for smelting, as it still is in Sweden, ironworks were always near great forests. In several


PORTLAND
MINNEAPOLIS
CHICAGO
SALT LAKE CITY
DENVER
OMAHA
SAN FRANCISCO
ST LOUIS
THE MOUNTAIN
COMMERCIAL
CENTER
KANSAS CITY
LOS ANGELES
OKLAHOMA
NEW ORLEANS
TUCSON

countries iron ores occur with coal, which is the chief fuel now employed for smelting, either in its natural state or after heating to form coke. The mixed ore and coal, along with limestone, are continuously fed into huge blast-furnaces, 70 to 100 feet high, in which the fire is kept up for months or years at a time. The molten **cast-iron** (an alloy of iron with carbon) is drawn off at intervals, and allowed to run into open moulds in sand, where it hardens into bars called *pigs*. In the process of Bessemer, and those of other inventors, cast-iron is purified by burning out part of the carbon until the metal becomes **steel**, or by burning it out altogether until pure iron is left. The United States is the greatest iron-producing country in the world.

Copper is found pure in great masses in the mines on the shore of Lake Superior, but it is most abundant in the form of ores—oxides, carbonates, or sulphides—spread in veins through rock. The sulphur ores of copper are very difficult to reduce to the metallic state. The famous copper-mines of Cornwall are now exhausted. The Calumet copper-mine near Lake Superior is the deepest which has ever been sunk, work being carried on at the depth of 4000 feet.

Tin, found along with copper in England, is still produced there to a considerable extent. There are very important mines in Australia, but the Malay peninsula is the tin centre of the world. The heavy rains of that region wear down the tin-bearing rocks and cover the river valleys with gravel containing ore, which is collected and smelted by Chinese laborers. The British port of Singapore exports the metal, collected from the neighboring islands, especially in Banka. It is used pure as block tin, but chiefly for coating iron, forming *tin-plate*, and in making *bronze*.

Lead is usually found combined with sulphur as an ore called *galena;* it is chiefly produced in the western United States, where the ore is doubly valuable on account of the large proportion of silver it contains, and in Spain. Lead is most largely used for water-pipes, for roofing, for the fittings of chemical works, and in making alloys.

Zinc or *Spelter* is much used for making *brass*, and also for

coating iron work (then called *galvanized iron*). It is chiefly mined and smelted in Germany and Belgium.

Platinum is a rare metal, always in demand on account of its infusibility, and incorrodible nature. It is now used chiefly for chemical apparatus, though once employed in the coinage of Russia. The main supply is from the Ural Mountains, a little also comes from Brazil.

Nickel occurs in New Caledonia, Canada, the United States, and Norway in greatest amount; it is difficult to prepare, but is employed, alloyed with other metals, for the small coins of a great many countries. It is extensively used for plating steel, for coating iron cooking vessels, for forming an alloy with steel for armor-plates, but principally in making the alloy with copper known as *German silver*.

Aluminum is the metal contained in common clay, but is usually extracted from the minerals known as Cryolite and Bauxite. It is now largely used for small wares instead of silver or iron. Its weight is only one-quarter that of iron.

Manganese is a metal of value as an alloy in the preparation of certain kinds of steel. The ore is mined chiefly in the United States, the Caucasus and Chile.

Sulphur, a non-metallic element, found nearly pure, occurs in all volcanic regions, and is worked chiefly in Sicily. It is principally employed in making sulphuric acid in Great Britain, the United States, and Germany.

Graphite, or *Plumbago*, one form of carbon, the only other non-metallic element of commercial importance occurring pure, is used for making "lead" pencils, for lubricating machinery, polishing ironwork, and other purposes.

Diamond, another form of pure carbon, is the most brilliant and costly of precious stones. India was once the great source of diamonds; the inland provinces of Brazil became more valuable during last century, and since 1867 the fields of Kimberley in Cape Colony have been most productive. Diamonds to the value of about 4 million pounds are annually exported by post from South Africa to Amsterdam, and London, where they are cut and polished.

Salt is prepared along the coasts of warm countries by evaporating sea-water in shallow tanks, exposed to the sun. A million tons a year are manufactured thus in the south of Europe. **Brine springs** are found by boring in many parts of the world, and largely supply the United States and China, the bores sometimes reaching 4000 feet in depth. These frequently yield natural gas as well, which the Chinese have utilized for centuries to evaporate the brine.

Cubic nitre (nitrate of soda) occurs in the Andes countries of South America; more than a million tons a year are shipped to Europe for use in chemical manufactures and as a fertilizing agent. Great deposits of **Borax** or *Tincal* are found in the deserts of Tibet, North America, and Peru. Another important mineral product used mainly as a fertilizing agent is **Phosphate Rock**, which is worked on a large scale in the southern United States.

Asbestos also is much in demand, its long fibres being capable of manufacture into fire-proof fabrics or into packing for steam-engines and other machinery where a soft substance which can withstand great heat is required. It occurs largely in Italy and Canada.

The **Building Materials** accessible in any place depend on the geological nature of the country. *Limestone*, *sandstone*, *granite*, or other formations, are quarried as building **stones**, and these are used in all regions where solid rocks come to the surface. **Brick** is baked from *clay*, and where extensive deposits of this material cover the ground bricks and tiles are used for building purposes. **White sand** for glass-making, **kaolin** or decomposed granite for the finest China-ware, **limestone** to be burnt for mortar and cement, the material for grindstones, lithographic stones and the like, are sought for and transported to the centres of manufacture and consumption.

Mineral Fuel. The residue of ancient vegetation is of great economic value as fuel. The difference between the various forms—*peat*, *lignite*, *coal*, and *anthracite*—is one of degree. About half the weight of dry wood is carbon, the other half being composed of hydrogen and oxygen. The effect of pressure and heat

in the absence of air, as when a vegetable deposit is buried deeply under rock material, is to decompose the wood, much of the oxygen and some of the hydrogen, with very little of the carbon, going away as gases, while the residue grows blacker and harder. As this process continues the proportion of carbon in the residue becomes greater, and the fuel increases in heating power.

Petroleum—a natural mineral oil resembling paraffin—is found in almost all parts of the world. It is worked commercially at Baku on the Caspian Sea, where the natural supply is greatest, in Galacia on the frontier of Hungary, in Rumania, in other parts of Europe, throughout Asia, in northern Peru and other parts of South America. In the eastern United States oil was struck in 1859 while boring for brine, and the greatest petroleum industry of the world has now its seat in Pennsylvania. Petroleum requires to be refined by distillation and other processes before it is fit for use; it is carried on land in tank wagons or by pipe lines, and in barrels on sailing ships, or in tank steamers by sea, the cargo being pumped on board the latter and discharged with great rapidity. About $2\frac{1}{2}$ million tons of purified mineral oil are burnt every year, of which the United States supplies 2 million tons.

Natural Gas occurs in many countries and has been utilized for raising steam, heating furnaces for melting glass and metals, and for lighting towns. The supply, usually very abundant when first struck in boring, falls off after some time: the year of greatest production was 1888, when many manufacturing towns in Pennsylvania, Ohio, Indiana, and Ontario used scarcely any other fuel.

Asphalt, though akin in composition to petroleum and occurring naturally in vast deposits, as in the Pitch lake of Trinidad, or in seams, as in Italy and the United States, is not mainly used for fuel. Its chief use is as a paving material when mixed with other substances.

Utilization of Resources. In this sketch of the mineral wealth of the earth it will be noticed that some products, like gold or coal, have simply to be *collected* in order to become useful; other

products, such as the ores of metals, and petroleum, required to be *worked up*, before they can be applied practically; the problem being in all cases to extract the valuable part of the raw material and produce it in a pure state. In all these processes of extraction, transport and purification, energy is expended, and as a rule this is obtained by burning fuel. Now, however, the energy of rivers, waterfalls and even of the tides is being utilized for separating metals from their ores and for doing other work, through the agency of electricity.

Vegetation is a form of life through which the energy of the Sun re-arranges some of the matter composing the air and the crust of the Earth, producing numerous valuable commodities. Vigorous plant-life depends chiefly on suitable soil, sufficient warmth, moisture, and abundant sunlight. Different climates are best suited to particular kinds of plants, and similar climates in all parts of the world have similar vegetation, the luxuriance and variety decreasing from the equator toward the poles, and from sea-level toward higher altitudes.

The staple **Food Material** of each country depends on the soil, climate, and facilities of communication. Sometimes it grows wild, like the **cocoanut** on the palms of tropical coasts, and the **banana**—most fruitful of all food-plants—in all tropical lands; or a certain amount of attention may be required, as for the **date** in Arabia. Careful **cultivation** is necessary to supply the great quantity of food-stuffs demanded in thickly-peopled districts. **Cereals**, the most important vegetable foods, are grasses which have been modified by cultivation until their seeds have become very large and nourishing. **Wheat** is the chief food-grain of Western Europe; **barley** is mainly used for brewing, and **oats** for feeding horses. In northern and eastern Europe **rye**, a hardy grain yielding a coarse brown flour, is most used. **Maize**, or *Indian corn*, with stalks 7 to 12 feet high and huge heads packed with close-set grains, is the one native cereal of America. It is grown enormously in the United States, and largely in Southern Europe, where it forms a considerable part of the food of the people. **Buckwheat**, the seed of one of the sorrel family is cultivated in Russia, in France, and in Alpine districts, but is only eaten by the very poor. **Rice** is almost the sole food of many

millions in Southern and Eastern Asia. It grows in the low swampy deltas of the great Indian rivers, around the Bay of Bengal, and over the wide plains of China, wherever sufficient water can be secured by irrigation. It is also a common crop in Egypt, in the North of Italy, and in the Southern United States. **Millet** in innumerable varieties is the staple food of most of the people of India, and is also greatly cultivated in China. The **potato** has for a long time been the main support of the peasantry of North Germany and Ireland, and **chestnuts** almost take the place of grain in some parts of Italy and Spain. The chief constituent of all these foods is *starch*, which occurs nearly pure in the **arrow-root** of the West Indies and other tropical regions, in **Tapioco** from the **manioc** root of South America, and in the pith of the great **sago** palm of the Malay Archipelago.

When the density of the industrial population is great the ground cannot yield a sufficient supply of food and there must consequently be **import of grain.** This is the case in all European countries except Russia, Austria-Hungary, and the Balkan States; but the cheapening of means of transport has brought all the producing regions of the world within easy reach.

Sugar occurs in nearly all vegetable juices. The **Sugar-cane,** originally a native of Asia, was cultivated for two centuries in the West Indies by slave labor until 1833, when the abolition of slavery nearly ruined the industry, which has never completely recovered. The cane is now grown in all tropical countries, the East Indies being most important. From the time of Napoleon's wars, when Europe was blockaded against West Indian produce, sugar-making from **beet-root** has been extending on the continent; and now of the five million tons or so of sugar annually manufactured more than half is from the beet, most of it being prepared in Germany. The stalks of the millet, the sap of the sugar maple of North America, and of the date-palm in India yield sugar readily, and considerable quantities are made from these.

Fruit has recently come to occupy an important place in trade. Not only are dried fruits such as *currants*, *dates* and *figs* imported, but *oranges*, *lemons* and *grapes* from Mediterranean ports, *apples* from America, *bananas* and *pineapples* from the West Indies,

grapes from South Africa, and fruit of several kinds from Australia and Tasmania are brought to Northern Europe in refrigerated chambers.

Spices. **Pepper,** the dried berry of a shrub, comes chiefly from Singapore; the great commercial emporium for the Malay Archipelago, in almost all the islands of which the pepper-plant grows. Much also comes from Java and other islands of the Dutch East Indies. The same port sends out **nutmeg**, the kernel of a plum-like fruit, and **cloves**, the dried flower-buds of a plant, which is however more extensively cultivated in Zanzibar and the neighboring island of Pemba. The rolled bark of the **cinnamon** tree comes chiefly from Ceylon, and the **ginger** root mainly from India, China, and West Africa. **Mustard** commercially the most important condiment, is imported from the East Indies and Asia Minor; it is also grown in Holland and England. **Vanilla** occurs in Mexico and India.

Tobacco, native to America, grows in almost all climates, tropical and temperate. Over 220,000 tons of the dried leaves are prepared every year in the United States, 150,000 tons in India, about 100,000 tons in Russia, and 60,000 tons in Austria-Hungary. Germany, Brazil, France, the Philippine Islands, Turkey, Japan, the Malay Archipelago and the West Indies are also large producers. In France, Italy, Austria-Hungary and Spain, the tobacco-trade is a Government monopoly; in all countries it is an important source of revenue.

Drugs. *Cinchona* bark yields **quinine,** the most valuable medicine obtained from the plant world, and, on account of its curative effects in fever, particularly important in unhealthy tropical countries. The tree is a native of the eastern forests of the Andes; but it is now largely cultivated in Ceylon, whence most of the supply for Europe is derived, in Java and India. Varieties of the **Eucalyptus** tree, native to Australia, have been introduced into all hot swampy districts on account of its power of destroying fever-breeding conditions. A valuable medicinal oil is extracted from its leaves. **Opium,** the dried juice of poppy heads, is a valuable medicine, but it is chiefly used as a narcotic. The **poppy** is cultivated in Egypt, Persia, Asia Minor, and largely in India, where it is a Government monopoly, the 6,000 tons

exported annually to China yielding nine million pounds sterling; the largest production is, however, in southern China. Most drugs are derived from tropical plants.

Oils are pressed from many fruits, particularly from the *Olive*, the *Almond*, the *Oil-palm* of West Africa, the *Cocoanut* (the dried kernel known as *copra*), *Earth-nut*, and the seeds of *Cotton*, *Flax* (for linseed oil) and other plants. These oils are chiefly in demand for soap-making.

Plants yielding drink may be grouped in two classes, (1) those containing sugar or starch capable of being changed into **alcohol** by fermentation—the action of microscopic plants contained in yeast—and (2) those bearing leaves or seeds that furnish a stimulating or nourishing beverage when an **infusion** is made with water.

Alcoholic Drinks. The **vine** is the most important of the former class; it flourishes no further north than 48° in France and 52° in Germany; in America its range is from about 38° N. to 38° S. The sweet juice of the grapes when fermented forms **wine.** France is the chief wine country, but the vine-growers there and elsewhere have for many years had a severe struggle against the depredations of the small insect, the *Phylloxera*, which destroys the vine by feeding on its roots. All the southern countries of Europe, and parts of America, Africa and Australia produce wine. **Beer** is the favorite native beverage in Europe north of 50° N. latitude. It is made from grain, usually barley, converted into *malt* by changing the starch into sugar, then mixed with water and fermented. The resulting liquor is flavored with **hops**; and brewing is usually centred near hop-raising regions. *Brandy* is distilled from wine, *whisky* from fermented malt, *rum* from sugar or treacle; large quantities of spirits are made in Russia and North Germany from potatoes, in Rumania from plums, in America from maize, and in different parts of the world from other vegetable products.

Non-Alcoholic Drinks. Cocoa, coffee, tea, *yerba mate* (Paraguay tea) and kola nuts, all contain a stimulating substance named *Caffeine*, to which their refreshing properties are due. **Cocoa**, first introduced from America by Columbus, remains the national beverage of Spain. It is prepared from the seeds or

"nibs" of the *Cacao* tree, and is chiefly cultivated in Ecuador, Trinidad, Venzuela, and other parts of South America; it has recently succeeded well in Ceylon.

Coffee, long used in Arabia, became generally known in Europe about 1650. The infusion of the roasted seeds is drunk most extensively in the countries on the eastern shore of the North Sea and in the United States. Brazil, where the tree found a congenial home, is the chief coffee-producing country, raising more than half the supplies of the world. Java ranks next, and Ceylon formerly held third place, but a disease—the *coffee blight*—reduced the export thence from 45,000 tons in 1876 to 9,000 in 1886, and only 2,000 in 1892. British Central Africa seems likely to take an important place in the production of Coffee.

Tea is the tender young leaves and shoots of a Chinese shrub or of an Indian tree, the various qualities distinguished by such names as *Pekoe*, *Souchong*, *Congou*, depending on the size of leaf and season of picking. One way of preparing the leaf produces *black tea*, the kind usually drunk in Great Britain; another gives *green tea*, which is preferred in North America. Small crops of tea have been raised in South America, Africa, Australia, and even southern Europe, but China, India, Ceylon, Japan, and Java are the only countries whose production affects the market.

Most of the Chinese tea is consumed in the country, only 110,000 tons being exported out of a total production of perhaps a million tons. The export goes partly overland to Thibet and Russia, some of it in the form of brick tea, but chiefly to Europe by sea. Japan produces mainly green tea and exports three-fifths of the crop to the United States. Since 1840 tea-growing has been spreading over India from the wet and fertile Assam valley, and it was introduced into Ceylon on the failure of the coffee plantations there. From India the total export is about 50,000 tons, and from Ceylon 30,000 a year. Indian and Chinese tea are used about equally in England, but the use of Indian and Ceylon tea has increased so rapidly that in 1892 one-sixth only came from China, one-third from Ceylon, and one-half from India.

Textile Plants. The fibrous bark of trees, dried grasses, palm-leaves, and other vegetable products, are employed for clothing,

almost without manufacture, by the uncivilized natives of tropical countries. **Flax** is grown chiefly in North Russia and Germany; nearly three-quarters of the annual world's supply of 500,000 tons coming from the Baltic shores. Belgium ranks after France and Austria-Hungary as to quantity, but produces at Courtrai the finest quality of flax in the market. The blue-flowered flax plant, about three feet high, is pulled and steeped in water until the soft parts have rotted away; it is then beaten or *scutched* to break up the woody substance and leave the long, fine, tough fibres which form the commodity. These are spun and woven into **linen**, a quarter of the world's produce being manufactured in the United Kingdom, chiefly in Ulster and the eastern counties of Scotland.

Jute grows in Bengal on the rich soil of the Ganges valley; the coarse fibre, after being rotted and freed from wood, is exported from Calcutta chiefly in sailing ships round the Cape, and manufactured almost entirely at or near Dundee. Cordage, carpets, and coarse *gunny cloth* for rice bags and cotton bales are the chief products. Gunny bags are exported to India, Australia, and to California for wheat; but as they are now being manufactured in Calcutta to save the expense of transport, there is severe competition.

Hemp, which can grow anywhere, is the best material for ropes and sail-cloth; that from Italy is the finest, and Russian ranks next. The hard, glistening *manila-hemp*, the produce of the stems of a species of banana, from the Philippine Islands, is the cheapest and most largely used fibre of this class. Much *henequin* or *sisal-hemp*, the fibre of a plant of the aloe family, is produced in Central America and in the Bahamas. *New Zealand flax* or *phormium*, and *ramie* grown largely in North Africa, are other fibres used for cordage and coarse fabrics.

Cotton is the staple of British trade, and England now consumes nearly 40 per cent. of all the cotton produced. This proportion was much higher formerly, in 1840 nearly 60 per cent.; but since that time the manufacture has been greatly extending in other countries. The *cotton shrub* or *cotton tree* grows in all tropical and warm temperate countries. The downy hairs surrounding its seeds are separated by *ginning*, and the raw cotton

is packed tightly in bales weighing about 440 lbs., for export to manufacturing centres. Most cotton is produced in the southern United States. The **manufacture of cotton** is the largest branch of textile industry.

Paper is made from a number of *vegetable fibres* by a process of pulping; only linen rags were formerly employed, but other materials are now most largely used, e. g. woolen and cotton rags, wood, straw, and esparto grass, or *alfa*, specially grown and imported from Spain and northern Africa. The chief paper manufactories are in the United States, England, and Germany. The material is often employed not only for writing, printing, wrapping and decorative purposes, but in the form of *papier-mache* as a substitute for wood in many branches of construction.

Gums and resins exude from trees, and are collected for use as drugs, dye-stuffs, or tanning material; *Gum Arabic*, *Gum Tragacanth*, *Camphor*, *Cutch*, and *Benzoin* (used for incense) are all obtained in various parts of southern Asia or East Africa. The bark of the **oak** and acorns (*valonia*) are largely used as tanning material in preparing leather, and so is *gambier* prepared from a tree grown in south-eastern Asia. The pine yields **turpentine, rosin,** and **tar,** the chief sources being the vast forests of Russia and North America. The juice of certain trees hardens into **india-rubber**, which is chiefly used for making water-proof clothing, and in the form of *ebonite* and *vulcanized rubber*, as a substitute for wood, metal, and leather. Half the india-rubber of commerce comes from the forests of Brazil, and much from Central America, and the west coast of Africa. The islands of the Malay Archipelago yield a similar juice, **gutta-percha,** which in many of its properties is more valuable than india-rubber, and is particularly employed in covering telegraph cables.

Dye-stuffs are obtained from the rope-like roots of the *madder* in Europe, the fermented stems of the *indigo* plant in India and Central America, and from the *log-wood* and other trees of South America. Many of these coloring materials are now obtained artificially from coal-tar, and their importance as vegetable products has become less.

Timber is the oldest material of construction; although no longer used in ship-building, except for small vessels, it continues in great demand, and the woods of the world are rapidly diminishing. In most European countries, and in India, forests are regulated by Government, and planting is carried on so as to insure a continuous supply. The soft northern **pines** form the chief basis of the timber trade, but large quantities of **hard wood** from southern forests are also felled and sold. British wood-supplies are drawn mainly from the shores of the Baltic, the neighborhood of the great lakes of Canada, and the Eastern United States. Ornamental woods, such as **walnut, maple, mahogany,** for furniture and ship fittings, come from North and Central America, the **cedar** for pencils almost exclusively from Florida, **ebony** from the east coast of Africa, **oak** and **cork** from Spain and Portugal. The giant pines of **red wood** in California, rising to a height of 275 feet, the great **kauri-pine** of New Zealand, and the magnificent **eucalyptus** and **jarrah** of Australia, which grows still higher, all furnish valuable timber. **Teak,** grown in the forests of India and Indo-China, is the most useful hard wood: it is very largely employed for building purposes in hot climates and for the decks and cabins of war-ships, as it is not attacked by white ants and does not splinter like oak when pierced by a shot.

ANIMAL COMMODITIES.

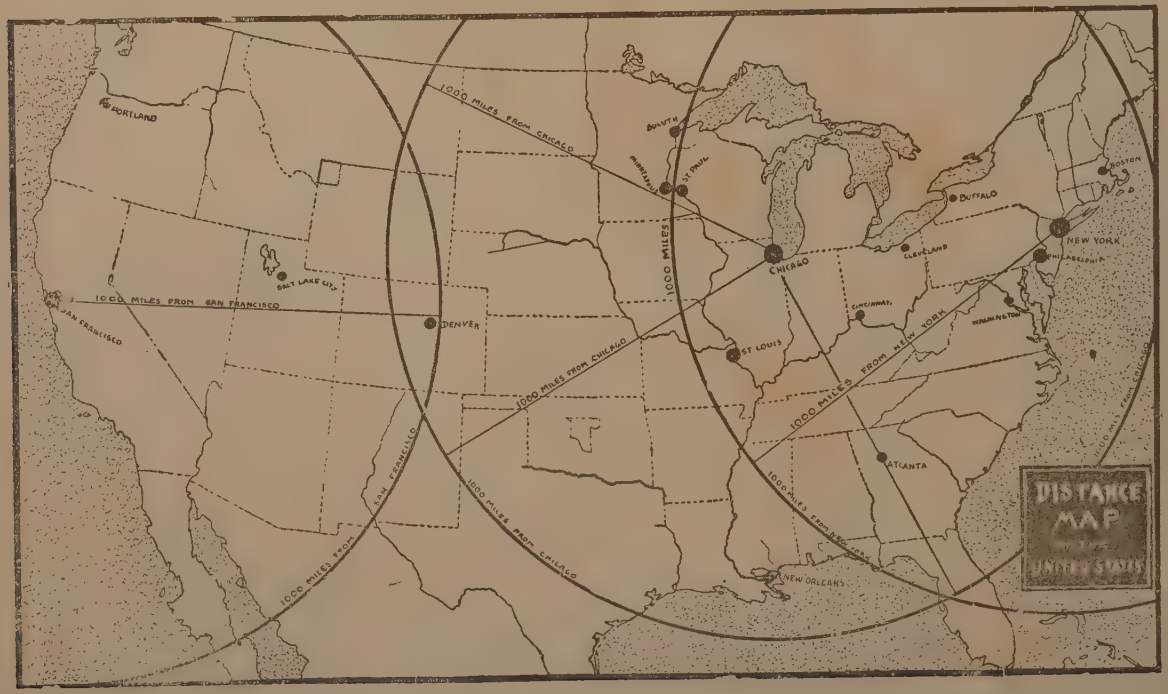
Animals convert the energy poured out by the Sun into useful work indirectly by feeding on plants or by devouring other animals which are plant-eaters; and thus they elaborate a number of useful commodities.

Distribution of Animals. The natural distribution of animals over the Earth depends, like that of plants, on the climate, the configuration of the land, and the supply of food. The *fauna*, or native animals of the old world (Europe, Asia, and Africa), differs from that of the new world (North and South America); but there is a similarity between them, e.g. between the lion and the puma, tiger and jaguar, camel and llama, crocodile and alligator, ostrich and rhea. The *fauna* of Australia is peculiar to itself,

containing no large quadrupeds, but only such creatures as the kangaroo, wombat, duck-bill, emu, cockatoo and apteryx.

Fisheries. The distribution of **fish** depends on the depth, warmth, and saltness of the water, and the abundance of food. As a rule the cool northern seas swarm with immense shoals of a few distinct species, such as the cod, haddock, and herring; while the warm tropical waters harbor a far greater variety of fish but smaller numbers of each. Marine animals are most abundant on the slopes of continental shores, and on shallow Fishing Banks rising up from deep water out at sea. The *Dogger Bank* in the North Sea for **soles** and other flat-fish, and the *Grand Banks of Newfoundland* for **cod** are the most famous. By an international agreement the fishermen of each nation have the exclusive right of fishing within three miles of their own coast; beyond that limit the sea is free to all. Fishermen are exposed to great dangers, especially from sudden storms springing up when the boats are at sea. In most countries there is a Weather Department of the Government which issues warnings by hoisting a signal at ever fishing-harbor a few hours before a storm is likely to come.

The **cod**, which is caught on hand-lines and preserved by salting or drying, is a renowned food fish, and yields a valuable medicinal oil from its liver. On the fog-veiled Banks of Newfoundland, where about 5,000 British, French, American and Norwegian vessels are always at work, the annual catch of cod is worth $20,000,000. The Norwegian cod-fisheries near the Lofoten Islands and the French on the coast of Iceland are next in importance. The **herring**, chiefly fished by means of narrow-meshed drift nets from Scottish ports, where 1½ million pounds worth are secured each year, is mainly exported salted to the continent of Europe. The **salmon** is caught in stake-nets or seines at the mouths of rivers, the greatest return being made in Britain and in North America; 25,000 tons are tinned every year on the Pacific coast alone. The **sturgeon** of the Volga supports a large trade chiefly in the preserved roe, called *caviare*, and in isinglass. The **tunny** and **sardine** of the Mediterranean are the most important food fishes of Southern Europe. Long lines, which sometimes extend for five miles, armed with several thou-


DISTANCE MAP
OF
UNITED STATES
1000 MILES FROM CHICAGO
1000 MILES FROM SAN FRANCISCO
1000 MILES FROM NEW YORK
1000 MILES FROM
PORTLAND
SAN FRANCISCO
SALT LAKE CITY
DENVER
DULUTH
MINNEAPOLIS
ST. PAUL
CHICAGO
ST LOUIS
BUFFALO
CLEVELAND
CINCINNATI
NEW YORK
PHILADELPHIA
BOSTON
WASHINGTON
ATLANTA
NEW ORLEANS

sand hooks baited with mussels, are set off the coasts of Britain for **haddock, whiting,** and other flat-fish—**sole, plaice, flounder, turbot,** etc., but most of the supply for the market is obtained by the use of the beam-trawl, a large net kept open by a beam 60 feet long, which is dragged over the bottom of the sea. Many kinds of fish have been reared artificially from their eggs, which are often transported successfully from one part of the world to another; for instance from Europe to South America and Australia, where rivers have been stocked with trout and other northern species.

Shell-fish. **Oysters** and other shell-fish thrive in warm shallow estuaries, and in many countries, particularly in the United States, Holland, and France, they are cultivated and watched over in order to increase the supply. **Pearls** occur in several shell-fish. There are famous fisheries of the pearl-oyster, worked by native divers on the south coast of India under Government control, and off the north and west of Australia, as well as in the Red Sea, Persian Gulf, and the Gulfs of Mexico and California. The fresh-water mussel yielding very large and lustrous pearls is found in some of the rivers of Europe, chiefly in Scotland, in America, and especially in China, where it grows to an enormous size, and is carefully cultivated, being treated so as to secure several crops of pearls without killing the shell-fish. **Pearl shells,** from which the iridescent mother-of-pearl is cut, are obtained most largely from the West Australian fisheries, and the material is worked into ornamental articles chiefly in Paris and Vienna. **Cowries,** small shells used as money in many uncivilized countries, are collected on the shores of the Indian and Pacific Ocean, and are of considerable commercial importance. **Lobsters** are caught in baited wicker traps, on the north-west coasts of Scotland and Ireland, and in Norway and North America. **Sponges** are dredged in the deep water of the Gulf of Mexico, the Red Sea and the Mediterranean.

Skins. Savage tribes satisfy their want of animal food and clothing by hunting and trapping, but the importance of these early branches of industry is steadily diminishing as the number of **wild beasts** decreases. The value of the fur-bearing animals of the north led to the appropriation of Siberia by the Russians

and to the original settlement of Canada by the French; and these countries still yield the richest supplies. About six million **squirrel** skins are obtained, chiefly from Siberia, every year; the only other wild animals killed in greater numbers than one million annually are the **rabbit** in Australia and Europe, **hare** in Europe and Asia, **musk-rat** in America, **nutria** in the Argentine Republic, and the **hair-seal** shot on the coasts of Newfoundland, Labrador, Greenland and in the Antarctic regions. The invention of silk hats has greatly reduced the value of the **beaver**, but the **fur-seal**, the skin of which when treated in a special manner yields a rich bronze-colored fur, is eagerly sought after in the barren islands near the Antarctic and Arctic circles. In Behring Sea the British and United States Governments regulate the trade, and limit the period of the annual slaughter. The **fox**, **wolf**, and **bear** are of value for their skin; there is a steady supply from Siberia and America. About 400 **lion** and **tiger** hides are obtained annually in Asia and Africa, and command a high price. London, Nizhni-Novgorod and Leipzig are the great world centres for the trade in skins. The **hides** of domestic animals, cattle, sheep, and horses are used in enormous numbers for making leather.

Ivory is obtained in greatest amount from the **elephants'** tusks in Africa, where it is calculated 65,000 elephants are killed every year, and the supply always becomes more difficult to obtain. The Indian elephants are domesticated and yield little ivory. The teeth of the **hippopotamus** in Africa, of the **walrus** and **narwhal** in the Arctic Seas, and the curled tusks of the extinct Siberian **mammoth** furnish a small and variable supply. The total annual production of ivory is about 1,000 tons, of which more than three-quarters comes from Africa. Its manufacture into billiard-balls, knife-handles, etc., is mainly carried on in England, but Dieppe is the centre of the trade in carved ivory.

Feathers. The feathers of the **ostrich** came originally from the wild birds of Africa and Arabia, but the increased supply is now derived from the tame ostriches bred on the feather-farms of Cape Colony, and to some extent in Algeria, the Argentine Republic, South Australia, and New Zealand. The brilliant little **humming-bird** of Central America and the West Indies

shares with the larger, but equally gorgeous **birds of Paradise** from the Malay Archipelago the first place for decorative purposes. Commercially the down which the **eider-duck** strips from its breast to line its nest is of great importance. This is collected on the lonely rocks of Norway and the western islands of Germany and Scotland. Most of the feathers of commerce are obtained from domestic fowls.

Whales. The **right whale** is hunted in the Arctic seas for the bony fringe that lines its jaws (*whalebone*, worth about $10,000 a ton), and for the oil yielded by its blubber. Other varieties of whale, including the great sperm whale of the tropics, are pursued for their blubber. Most whaling is done by American and Norwegian vessels; the fleets that formerly sailed from Dundee, Peterhead, and Hull are now reduced to less than a dozen steamers, and as the right whale has been nearly exterminated, these vessels only pay their way by engaging in seal-hunting also.

Insects. The scarlet **cochineal** dye, made up of the powdered bodies of a little Mexican insect, cultivated also in the Canary Islands, has become of little importance since the development of coal-tar colors. The little **lac** insect causes a secretion of resinous substance on the twigs of trees in India and other tropical countries which is used as *shellac* for making varnishes and sealing-wax, and for stiffening the cloth of which silk hats are made.

Live-Stock. The amount of live-stock in each country is constantly changing since the improvement and cheapening of means of transport make it economical to breed fewer and finer cattle in industrial regions where grazing and ground is scarce, and to import the chief supplies from abroad where land is cheap and pasture abundant. America and Australia produce most **tallow** and **bones**. About $75,000,000 worth of raw **hides** are brought into Europe every year, chiefly from South America and India, to be tanned and converted into *leather*, along with the great quantity produced on the spot. **Live cattle** are exported in numbers, and have been carried safely on sea voyages of several months, but the danger of introducing infectious diseases makes it necessary to conduct this trade under many restrictions.

Meat may be preserved by rendering it unfit to support the life of the minute germs which produce putrefaction. This can be done by sun-drying (as in the case of *charqui*, or jerked beef exported in small quantities from South America), by salting, or by simply lowering the temperature. The germs may also be killed by exposing the meat to a high temperature for a short time, and the meat is then preserved by sealing it up in air-tight tins. Large factories for *tinning meat* are established in many parts of the world, particularly in America. The use of animal food is much more general in some countries than in others, the proportion being greatest in Australia and least in Russia for civilized countries. The Liebig meat company at its great establishment in Fray Bentos, Uruguay, boils down beef into a strong *extract* which contains neither bones nor fibre; and this one company slaughters more than 200,000 cattle annually. Since 1877 the **transport of meat** has been revolutionized by the use of *refrigerating machinery*. Sailing ships, occupying over three months on the voyage, now bring cargoes of fresh mutton from New Zealand to England in perfect condition. The meat is either frozen and packed in an icehouse kept at a temperature below the freezing point, or simply kept cool by air which has passed over ice. In the Bell-Coleman process compressed air at the ordinary temperature is allowed to expand into the chambers; in so doing it becomes greatly chilled, and a temperature as low as desired can be kept up for any time. In 1893 there were imported into England 3,900,000 frozen carcasses of sheep and lambs from New Zealand, Australia, and the River Platte.

Dairy Produce. The trade in dairy produce, milk, cream, butter, and cheese, is usually confined to adjacent countries. **Cheese** and **butter** indeed are brought to Europe from America and even Australia, but butter is being largely superseded by *margarine* or purified animal fat, which is equally palatable and nourishing. **Eggs** of common fowls are an article of trade. The chief hen countries of Europe are France, Austria-Hungary, Russia, Italy, Belgium, and Denmark; but China contains more fowls than any other part of the world.

Wool, from its value as clothing, holds a high place amongst textile materials. The merino-sheep, a native of Spain, yields

the finest quality of wool, and this breed has been introduced and acclimatised in Australia, South Africa, and America. Sheep are clipped once a year, and on being washed, to free it from its natural grease and the salts resulting from the evaporated sweat of the animal, the fleece loses nearly half its original weight. The four greatest sheep-raising regions, Australia, the Argentine Republic, Russia, and the United States, produce three-quarters of the world's supply of wool. The **Angora goat** of Asia Minor has particularly fine wool, called *mohair*, and has been successfully introduced into Australia and South Africa. The **Kashmir goat** of the Himalayas, the **camel** in China, and the **alapaca** in the Andes countries also yield important supplies. England is the greatest wool-manufacturing country, France comes second, and then follow the United States, Germany and Belgium. The wool, after being cleaned, is first spun into yarn or worsted and then dyed. Some is exported in this state, the rest is woven, either alone or mixed with cotton, into cloth of various qualities, such as broad-cloth, tweeds, and flannels.

Silk. Many caterpillars spin a *cocoon* of soft fibrous threads before assuming the chrysalis state, and the cocoon of several wild species (*tussar*-silk) are collected in India and manufactured into silk, but the Chinese **silkworm** is the only insect reared for this purpose. It it fed on mulberry leaves, and 1 oz. of eggs when hatched produces caterpillars which devour about 770 lbs. of leaves, and yield about 15 lbs. of raw silk. Like all animals brought up in artificial conditions, the silkworm is liable to many diseases; an epidemic which broke out among these insects in the south of France in 1851 nearly ruined the silk trade for a time. To restore it a new breed of worms was introduced, and a steady trade is now done in silkworm eggs with China, whence the European supply had been originally derived in the sixth century. Perfect cocoons when unwound and cleaned furnish *reeled silk* of the finest quality; an inferior kind (*spun silk*) is obtained from the floss or outer covering and from the cut or damaged cocoons. Most of the silk produced in Europe comes from the province of Piedmont in the north of Italy, but Lyons, in France, is the greatest manufacturing centre of this industry. The manufacture of silk has long been declining in Britain, and

as steadily increasing in Germany. The export of raw silk from China equals the entire production of Italy. At the present rate of increase, Japan will soon lead in silk production and manufacture.

NATURAL RESOURCES OF THE UNITED STATES.

Coal. The United States possesses a very large supply of coal. We learn, from statistics, that France has *one* square mile of available coal to every two hundred square miles of territory; Great Britain *one* square mile to twenty square miles of territory. England has 6,200 square miles of workable coal fields, more than half the coal-producing area of Europe. The United States has more than 300,000 square miles of known coal-producing area. In the anthracite coal district of Pennsylvania, the available coal is fully sixty feet in thickness, producing 60,000 tons to the area. Pennsylvania supplies one-half the coal used in the United States, Illinois ranks second, and Ohio third. Pennsylvania furnishes nearly all the **anthracite,** or hard coal mined in the country, as well as a large part of the soft or **bituminous** coal. There are extensive coal fields in Iowa, Missouri, Kansas, Nebraska, Kentucky, Tennessee and Alabama, and smaller fields scattered throughout the entire west. Michigan has an isolated coal-field of about 6,700 square miles. The coal is not as valuable as some others, because of its containing so much sulphur. Nearly all the coal of the prairie States is **bituminous.**

Iron. There are four leading iron-ore districts in the United States. These are all in old worn-down mountain regions. The most productive district is near the shores of Lake Superior. The other districts are the Allegheny ridges in Pennsylvania and New Jersey; the Adirondack mountains in New York, and the southern part of the Appalachian highland in Alabama. The process of extracting iron from its ore is called **smelting.** The usual mode of smelting is as follows: The ore and coal with some limestone, are placed in a tall furnace, and the coal is then set on fire. A hot blast of air is forced through the burning mass to strengthen the fire. As soon as the ore melts, the heavy

liquid sinks to the bottom and is drawn off, while the impure matter, or **slag**, floats on the surface. In some districts natural gas is used for fuel. The molten iron is usually run into molds where it cools in short bars weighing about 100 pounds each. In this form the metal is called **pig iron**. The United States leads all other countries in the production of iron. Great Britain ranks second; Germany, third. Pittsburg is the commercial centre of the iron trade.

Cotton. Cotton requires a very long, warm season to ripen its seeds. Cotton areas are found in warm belts having an abundance of rain-fall. Texas and Georgia lead all other States in the quantity of cotton produced. The United States ranks first in the production of cotton. About one-third of the crop is used in the mills of our own country. Raw cotton to the value of $250,000,000 is exported annually. Three-fifths of this goes to the mills of Great Britain. The great cotton center is New Orleans. Savannah, Galveston, Norfolk and Charleston have a large export trade. Fall River and Lowell are the great centers of cotton manufacture.

Wheat. The Red River Valley, in North Dakota, and Manitoba promises to be the greatest wheat producing district in the world. The section of the United States, specially noted for wheat, includes the entire valley of the Mississippi and its branches, north of St. Louis. The United States leads the rest of the world in the production of wheat. France, India and Russia have very large yields. Minneapolis has the largest flour mills in the world. St. Louis ranks next among American cities. Duluth is noted as a wheat-shipping point.

Corn. The best districts for corn are found in the southern half of the prairie section. The center of this corn belt runs east and west, passing between Chicago and St. Louis. It reaches the Alleghany plateau on the east, and the great plains in the west. Large quantities of corn are exported.

Tobacco. The chief tobacco districts of the United States are the Ohio River Valley, the Piedmont slopes east of the Blue Ridge, the district crossing from Lake Ontario to Chesapeake Bay, and the Connecticut River Valley. Louisville is a great

SAMPLE COMMERCIAL TRAVELLERS' ROUTE MAP OF THE EASTERN AND NEW ENGLAND STATES.

tobacco market. New York, St. Louis and Richmond are manufacturing centers for tobacco goods. The United States raises more tobacco than any other country. India, Hungary, the West Indies, Russia and Egypt supply large quantities of tobacco.

Lumber. There are many abundant lumber districts in the United States. Michigan, Maine, Washington and California will take first rank as lumber-producing States. Chicago is the leading lumber market in the world. Many cities of the lake region manufacture furniture. The most noted of these is Grand Rapids.

Fish. *Oysters* are the most valuable food-product taken from the shore waters of the United States. The most extensive oyster fisheries in the world are carried on in Chesapeake Bay. Baltimore is the center of the oyster trade. The **cod** fisheries, off the *banks* of Newfoundland, rank next in importance. **Mackeral** are caught chiefly along the Atlantic coast, between Cape Hatteras and Gulf of St. Lawrence. The **salmon** fisheries of the Pacific coast are a very important industry. The white fish and lake trout of all the lakes add largely to the fish-product of the country. Gloucester, on the coast of Massachusetts, is the greatest fishing port in the Union.

Petroleum. Crude petroleum comes in a liquid state from the ground. It is thought to result from the decomposition of plants and animals buried long ago in the rock-layers. The oil is now reached by sinking pipes down to the oil-bearing layers of porous rock. In rare instances more than 1000 barrels of oil have flowed from a single well in a day. There are two well-known oil-fields in the world,—one in the region of the Caucasus mountains; the other in Western Pennsylvania and Eastern Ohio. Among the great cities which refine large quantities of petroleum, are Cleveland and Philadelphia. Millions of dollars' worth are exported yearly. Long pipes have been laid from the tanks in the oil-fields to the cities in which the petroleum is refined. Some of these pipes are hundreds of miles in length, and the oil is sent through them by powerful force-pumps. In the oil-fields, and extending somewhat beyond their limits, is found *natural gas*, which is extensively used for heating and manufacturing purposes.

Gold and Silver. The gold and silver fields of the United States occupy an area of about 150,000 square miles. This resource of wealth has an extensive influence upon the commerce and civilization of the world. The richest gold-fields of the world, outside of the United States, are in South Africa and Australia. Gold is found pure in nature. It is most often taken from veins of quartz-rock, or from old river gravels formed largely of the washings of quartz-veins. Silver is rarely found in a pure state, but is almost always combined with other mineral substances. America supplies most of the silver in the world. About two-thirds of the ore mined in our country is taken from the Rocky mountains of Montana and Colorado.

Copper and other Metals. The United States leads all other countries in the production of **copper.** The most valuable mines are in Montana, Michigan and Arizona. Iron is the only other metal of larger commercial value. Spain, Chile and Germany are larger producers of copper. England buys more than one-half the copper mined in the United States. Most of the **lead** produced in this country comes from ores of silver mined in the Rocky mountains. Galena, Illinois, is the center of the most important lead mines in the United States. There are important **quicksilver** mines in California. These are near San Jose, and are the richest in the world. **Graphite** is found in different localities in New England. The mine at Ticonderoga, N. Y., is considered one of the finest in the country.

Salt. Salt is found, more or less, in several States of the Union, but in every three or four places in such quantities as to warrant extensive works for its manufacture. In the vicinity of Syracuse are the most important salt-works in the United States. Michigan, Kansas and West Virginia have important salt springs.

LARGEST CITIES OF THE EARTH.

POPULATION ACCORDING TO THE LATEST OFFICIAL CENSUSES.

Cities.	Census Year.	Population.	Cities.	Census Year.	Population	Cities.	Census Year.	Population
London	1891	4,231,431	Stockholm	1890	246,570	Ahmadabad	1891	145,990
Paris	1891	2,447,957	Lisbon	1878	246,340	Providence	1895	145,472
New York	1892	1,801,739	Dublin	1891	245,000	Rochester	1892	144,834
Canton	est.	1,600,000	New Orleans	1890	242,039	Dusseldorf	1890	144,460
Perlin	1890	1,579,244	Pittsburgh	1890	238,617	Altona	1891	143,250
Tokio, Japan	1890	1,389,684	Antwerp	1892	232,753	Seville	1887	143,180
Vienna	1890	1,364,548	Washington	1890	230,392	Nuremberg	1890	142,590
Philadelphia	1892	1,142,653	Benares	1891	222,520	Bologna	1894	142,400
Chicago	1890	1,099,850	Bucharest	1876	221,810	Leicester	1891	142,050
St. Petersburg	1892	1,035,434	Bristol, Eng	1891	221,670	Omaha	1890	140,452
Pekin	est.	1,000,000	Hong Kong	1891	221,440	Stuttgart	1890	139,820
Brooklyn	1892	957,163	Rotterdam	1891	216,680	Chemnitz	1890	138,950
Constantinople	1895	873,560	Montreal	1891	216,650	Kobe, Japan	1890	136,970
Calcutta	1891	840,130	Bradford, Eng	1891	216,360	Amritsar, India	1891	136,500
Brooklyn	1890	806,340	Genoa	1894	215,300	Kazan	1890	134,360
Bombay	1891	804,470	Nottingham	1891	211,984	Malaga	1887	134,060
Rio de Janeiro	1892	800,000	Teheran	1881	210,000	St. Etienne	1891	133,440
Moscow	1888	798,740	Alexandria	1882	208,760	Adelaide	1891	133,220
Glasgow	1891	618,470	Detroit	1890	205,876	St. Paul	1890	133,156
Beunos Ayres	1894	580,371	Milwaukee	1890	204,468	Kansas City	1890	132,715
Hamburg	1890	569,260	Magdeburg	1890	202,230	Oldham	1891	131,460
Naples	1894	522,700	Lille	1891	201,210	Sunderland	1891	130,920
Liverpool	1891	517,950	Florence	1894	200,300	Howrah, India	1891	129,800
Buda-Pesth	1891	506,380	Smyrna	1885	200,000	Cardiff	1891	128,850
Manchester	1891	505,340	Damascus		200,000	Lemberg	1891	128 420
Brussels	1893	498,400	Bahia	1892	200,000	Yokohama	1890	127,990
Boston	1895	494,205	Hull	1891	199,990	Colombo	1891	126,930
Melbourne	1891	490,900	Havana	1887	198,270	Eiberfeld	1890	125,800
Warsaw	1892	490,420	Salford, Eng	1891	198,140	Bremen	1890	125,680
Osaka, Japan	1890	478,540	Riga	1888	195,670	Lodz, Russia	1890	125,230
Madrid	1887	472,230	Delhi	1891	193,580	Strasburg	1890	123,500
St. Louis	1890	451,770	Pernambuco	1892	190,000	Saratoff, Russia	1890	123,410
Rome	1894	451,000	Kharkoff, Rus	1888	188,470	Aberdeen	1891	123,330
Madras	1891	449,950	Mandelay	1891	187,910	Nantes	1891	122,750
Baltimore	1890	434,440	Newcastle	1891	186,350	Bareilly, India	1891	121,870
Milan	1894	432,400	Prague	1891	186,110	Danzig	1890	120,390
Birmingham	1891	429,170	Kieff	1891	183,640	Srinagar, India	1891	120,340
Amsterdam	1891	426,910	Jersey City	1895	182,981	Kishineff	1889	120,070
Lyons	1891	416,030	Cawnpore	1891	182,310	Blackburn	1891	120,060
Marseilles	1891	403,750	Newark	1890	181,830	Aleppo	1885	120,000
Sydney	1891	383,390	Toronto	1891	181,220	Tunis		120,000
Shanghai		380,000	Rangoon	1891	181,210	Meerut	1891	118,760
Cairo	1882	368,110	Tabriz, Persia	1881	180,000	Nagpur	1891	117,910
Leeds	1891	367,510	Bagdad	1885	180,000	Baroda	1891	116,460
Munich	1890	349,020	Frfort-on-Main	1890	179,990	Le Havre	1891	116,370
Turin	1894	335,900	Bangalore	1891	179,670	Stettin	1890	116,230
Breslau	1890	335,190	Allahabad	1891	176,870	Barmen	1890	116,140
Mexico City	1890	329,540	Lahore	1891	176,720	Brighton	1891	115,400
Sheffield	1891	324,240	Montevideo	1889	175,000	Bolton	1891	115,000
Odessa	1890	313,687	Valentia	1887	170,760	Roubaix	1891	114,920
Copenhagen	1890	312,590	Agra	1891	168,710	Graz	1891	113,540
San Francisco	1890	298,997	Patna	1891	167,510	Rouen	1891	112,350
Cincinnati	1890	296,908	The Hague	1891	165,560	Vilna	1888	109,526
Leipzig	1890	295,020	Minneapolis	1890	164,738	Surat	1891	108,000
Kioto, Japan	1890	289,590	Hanover	1890	163,590	Preston	1891	170,570
Cologne	1890	281,680	Konigsberg	1890	161,670	Athens	1889	107,250
Buffalo	1892	278,796	Louisville	1890	161,129	Denver	1890	106,713
Dresden	1890	276,520	Portsmouth	1891	159,260	Oporto	1878	105,838
Palermo	1894	276,000	Trieste	1891	158,340	Indianapolis	1890	105,436
Lucknow	1891	273,090	Dundee	1891	155,680	Crefeld	1890	105,380
Barcelona	1887	272,480	Liege	1892	153,324	Allegheny	1890	105,287
Edinburgh	1891	264,800	Venice	1894	150,900	Goteborg, Sw	1891	104,660
Cleveland	1890	261,353	Kristiania	1891	150,440	Karachi	1891	104,250
Belfast	1891	255,950	Ghent	1892	150,220	Reims	1891	104,190
Bordeaux	1891	252,420	Valpariso	1890	150,000	Aachen	1890	103,470
Seoul, Korea		250,000	Toulouse	1891	149,790			
Santiago	1890	250,000	Messina	1894	146,400			

SMALL CITIES
CENTERS OF LARGE INDUSTRIES.

Worcester, Mass. Noted for its manufacturing industries.

Fall River, Mass. Cotton mills. It would take three-fourths of all the gold mined yearly in the United States to pay for the annual out-put of the cotton mills of this city.

Lowell, Mass. Cotton mills. Proprietary medicines.

Lawrence, Mass. Woolen and cotton manufacturing.

Lynn, Mass. Great shoe manufacturing center.

Holyoke, Mass. Noted for paper mills.

Bangor, Me. A great lumber market.

Manchester, N. H. Very large cotton mills.

Pawtucket, R. I. Cotton manufacturing.

Bridgeport, Conn. Manufacturing industries.

Waterbury, Conn. Famous for its brass manufacturies; its best known articles are watches, clocks and pins.

Scranton, Reading and Erie, Pa., have large iron works.

Newark, N. J. Tanneries, patent leather, jewelry.

Paterson, N. J. Largest silk factories in the United States.

Trenton, N. J. Famous for its potteries.

Dover, Del. Fruit Canning.

Richmond, Va. Tobacco manufactories.

Wheeling, W. Va. Noted for its nail works.

Parkersburg, W. Va. Large trade in oil.

Raleigh, N. C. A leading cotton market.

Charleston S. C., Wilmington, N. C., export more rosin and turpentine than any other two ports in the world.

Atlanta, Ga. A Southern trade center.

Charleston, S. C., ranks next to New York and New Orleans in the export of cotton.

Augusta, Ga. Largest cotton mills in the South.

Key West, Fla. Noted for manufacture of cigars.

Pensacola, Fla., exports lumber.

Birmingham, Ala. Extensive manufacture of iron and steel

Memphis, Tenn. Important cotton port.

Chattanooga, Tenn. Important iron and steel industries.

Shreveport, La. An important cotton market.

Galveston, Texas. An important cotton port.

Little Rock, Ark. Cotton-seed oil.

Fort Smith, Ark. A Western trade center.

Columbus, O. Carriage manufactories.

Youngstown, O. Iron and steel industries.

Fort Wayne, Ind. Important trade center.

South Bend, Ind. Famous for its wagons and plows.

New Albany, Ind. Extensive glass works.

Grand Rapids, Mich. Noted for its extensive furniture factories.

Saginaw, Bay City and Muskegon, Mich., have immense trade in lumber.

Racine, Wis. Manufactures farm implements.

Des Moines, Iowa. A great grain market.

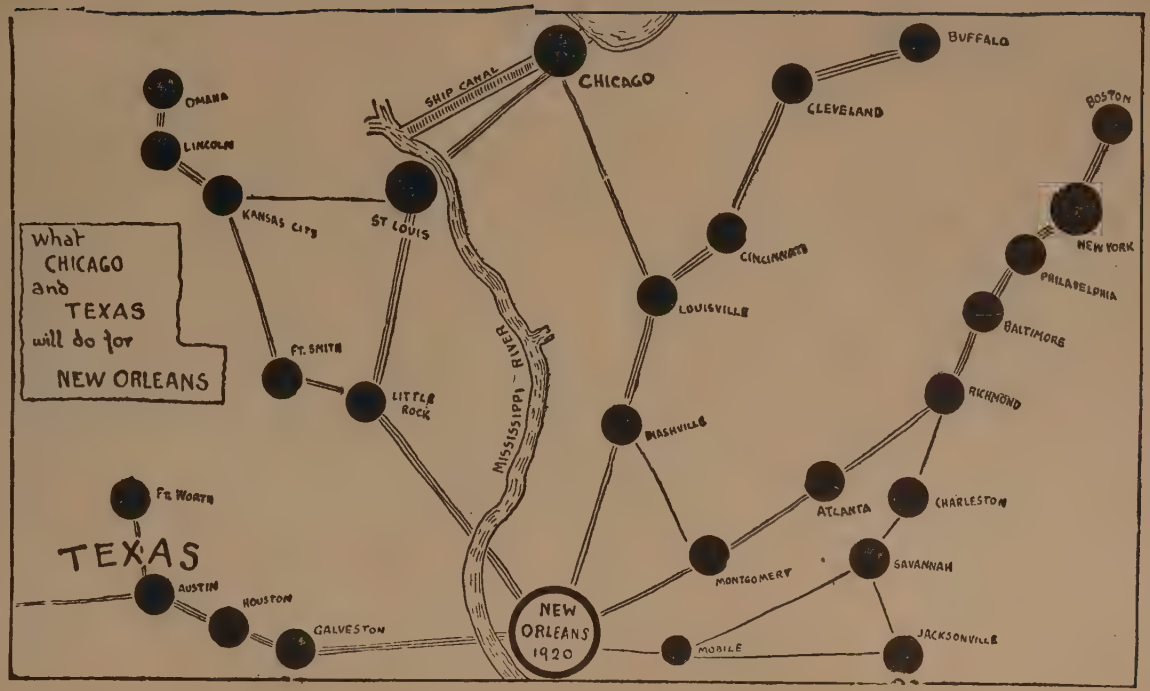
Duluth, Minn., is a very important shipping center.

Topeka, Wichita and Leavenworth, Kan., are important market centers for grain and cattle.

Pueblo and Leadville, Colo., have large smelting works. Leadville has been one of the greatest silver-mining cities in the world.

Los Angeles, Cal. A great fruit market.

Cheyenne, Wyo. One of the largest cattle markets in America.


What CHICAGO and TEXAS will do for NEW ORLEANS
SHIP CANAL
CHICAGO
BUFFALO
CLEVELAND
BOSTON
OMAHA
LINCOLN
KANSAS CITY
ST LOUIS
NEW YORK
PHILADELPHIA
CINCINNATI
LOUISVILLE
BALTIMORE
FT. SMITH
LITTLE ROCK
MISSISSIPPI RIVER
RICHMOND
NASHVILLE
FT. WORTH
TEXAS
ATLANTA
CHARLESTON
AUSTIN
HOUSTON
GALVESTON
MONTGOMERY
SAVANNAH
NEW ORLEANS 1920
MOBILE
JACKSONVILLE

1920
What rapid suburban transit
will do with the people of
NEW YORK CITY in
25 Years
HUDSON RIVER
HARBOR
CONEY ISD

MONEY CENTERS OF THE WORLD.

LONDON

NEW YORK CITY

London is to-day the great money center of the world. England owes her commercial power to this fact. Every important money transaction of Europe, Asia and Africa is made possible only through agents of London's great banking institutions.

New York City is to the new world what London is to the entire world.

SHIPPING CENTERS OF THE WORLD.

YOKOHAMA	GALLE	ANTWERP
SHANGHAI	BOSHIRE	BERGEN
CANTON	NATAL	LONDON
SYDNEY	CAPE TOWN	LIVERPOOL
MELBOURNE	ODESSA	GLASGOW
SINGAPORE	SMYRNA	BUENOS AYRES
CALCUTTA	MARSEILLES	RIO JANEIRO
BOMBAY	GENOA	CALLAO
TAMATIVE	MALAGA	VALPARAISO
NEW ORLEANS	HAVRE	HAWAII
BALTIMORE	HAMBURG	HAVANA
PHILADELPHIA	NEW YORK	BOSTON
MONTREAL	HALIFAX	PORTLAND
SAN FRANCISCO	ST. JOHN	VANCOUVER

HOW TO SECURE FOREIGN TRADE.

Britain was the first country to develop international trade on broad lines; this gave her an enormous advantage. Yet the United States, in spite of her gigantic labor of subduing a continent, was pressing her hard up to the outbreak of the civil war. At the time when iron was taking the place of wood in shipbuilding, the energies of our people were turned from commerce to fighting. So, taking advantage of the temporary withdrawal of her only dangerous rival, England pressed forward with characteristic pertinacity. Her colonial system assured her the preference in innumerable markets. Her great navy policed the seas; her merchant marine, transformed from sail to steam, visited all ports. Her profits were so vast that she became more than ever the great lending nation, and her commercial supremacy was unquestioned until the unification of Germany created a European competitor, and until the United States, her task of subduing a continent measurably completed, awoke to find that in developing her resources she had armed herself to battle for the world's commerce with her ancient rival.

But the foreign commerce of Great Britain is nearly double that of any other country. Of the articles she exports, a large proportion is made up of goods manufactured from imported raw materials, and she does a great trade in the products of other countries sent to England and there stored for redistribution. What are the qualities which have enabled the British merchant to dominate the trade of the world and to exact a profit from most of the world's commerce?

The British merchant is cool-blooded, yet bold in his transactions; he inclines to large operations rather than to the drawing of excessive profits from small business. He acts on the guiding principle of modern commerce, that the larger prosperity comes from bringing together the producer and consumer rather than

from keeping them apart. He does not obstruct rivals by legislative restrictions. Any American ship can enter the coasting trade of Great Britain, and is in all things exactly on the footing of a British ship. In no portion of the vast colonial empire is there any discrimination against commerce with a foreign State, save such as is equally applied to Britain. The attitude of the British merchant is that of a man who can care for himself. If he cannot sell British goods, he will *deal in American* or *German goods*, and, *as a fact, a large share of our exports are sold to and distributed by British merchants.*

He is not personally popular in foreign countries. His exclusiveness and his sense of his superiority offend and repel many. When living in a foreign country he generally attempts to create a *little England and to maintain as closely as possible the English manners and customs.* He has his club in each commercial centre, where the English standard of comfort and dignity is scrupulously maintained; an English church, where he prays for the Queen and Royal family. He introduces British sports, and even plays cricket in the tropics. He has forced English clothes and oaths upon foreign nations, and when he speaks any other language than English, *he does it with a tolerant condescension and an intolerable accent.*

The British merchant has a high sense of personal honor, and will seldom do anything unscrupulous, yet he will often avail himself of the sharp practices of others, and utilize for his own profit the weakness or dishonesty of native races.

His sense of the paramount importance of trade is shown in the London habit of going to business in a black frock coat and a silk hat, and anyone desiring to approach him will, if wise observe the unwritten law of prim and uncomfortable attire. He is not only formal, but difficult of access. All the world hies to London to secure capital or support, and if a merchant has wealth, he must guard his time by exclusiveness.

He dislikes the telephone, which enables any man to intrude upon his business privacy. He rather resents the small conveniences and facilities of office organization. Owing to the high

training of his confidential clerks, he can dispense with the stenographer, and he is reluctantly adopting the typewriter. But he will invest great sums in steamship lines which cannot possibly pay, knowing that if he lose on the steamships he will more than make it up in the profits on the merchandise transported. As the people of the United States push railways into undeveloped lands and so build up the country, he pushes his steamship lines into the most obscure and distant harbors and finds a reward. He spends vast sums in laying cables across the ocean floors in order that he may promptly learn all price-making facts, and buy or sell on the instant.

The training in British commercial houses is admirable. The system puts a high premium on industry, accuracy and faithfulness. While the rise from the lower positions is slow, yet, in all but "family" businesses, a man of ability can command promotion. As the boys grow up, they receive special training to fit them to represent the firm abroad. A clerk slated for such a position is passed from one department to another until he thoroughly understands the methods of the home office. He is then tested at one of the agencies of the firm, or is sent abroad as a commercial traveler, and, if found fit, steadily rises.

After years spent in some foreign country, he returns to England with the most intimate knowledge of the conditions affecting its commerce. He conforms to English customs, reaches his office at ten, receives callers up to twelve or one, lunches at his club, spends the afternoon looking after his business affairs, and about four o'clock leaves his office and his business in the charge of highly-trained subordinates, the "faithful failures," who are so numerous in England. For, while the Englishman is carefully trained in details, he is wise enough to know that as he deals with larger matters, he must shorten his hours of work and learn to let others carry out his orders. He takes frequent vacations, and keeps his mind fresh. He pays much attention to British sports. He is often elected director in a London bank connected with the region where he has passed his business life abroad. While an important man in the commerce of the region where he has passed many years of his business life, he

often finds that in London he is obscure. He goes in for social life, and spends his money freely in forcing a recognition for himself and family. Frequently defeated in this ambition, he returns to the country where he has made a place for himself. He essays public life and often gets into Parliament, where his experience is of the greatest value in guiding international legislation. He gathers around his table those he desires to cultivate. These dinners may be dreary and pompous, but often merchants discuss with ability, and always from an English standpoint, the commerce of the world, and recount in their passive way events and incidents that prove the courage, tenacity and arrogance of the race. If the host can bring it about, he will have among these men of affairs some men of rank. The deference of merchants to noblemen is indicative of the social dominance of titles. This glamor seems to affect the judgment of the British merchant, and the best *proof of this is the constant use of "guina pigs" in the floating of companies*—titled nobodies who give the use of their names as directors in return for the guinea fee they receive at meetings.

The British merchant is fully holding his own in the commerce of lands where the Anglo-Saxon dominates, but he is losing ground in the countries peopled by the Latin races. In Chile, the Scotsman, perhaps the keenest type of British merchant, is still dominant, though hard pushed by the German. In Brazil, the Portuguese, trained in the school of frugality by the adverse conditions of Portugal, is steadily crowding him out. In the La Plata countries, Uruguay and the Argentine, the Italians are supplanting him. In Mexico he has been actually driven out by the German, while the commerce of the republics of the Spanish Main and Central America is divided between the Germans and the many able merchants born and bred in those countries.

But even where he is not holding his own as a merchant he keeps his grip as a banker, and so gets a profit from the business of his rivals. The magnificent banking system of England is her *greatest strength and most powerful support in controlling foreign trade.* More than one hundred banks, with a great capital, a London home office and branches in all the commercial centres of the countries with which they do business, facilitate the financing of Great Britain's foreign commerce. Not only do they draw a profit

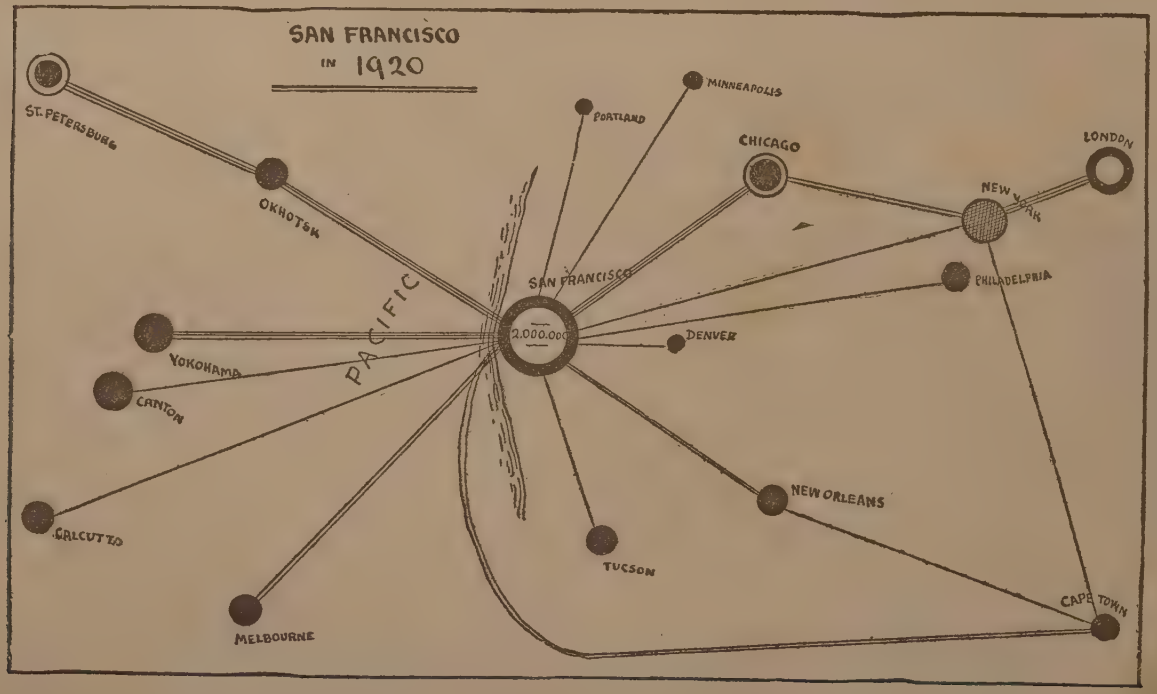
from British transactions, but hardly a bag of coffee, or a bale of hemp can be moved from one country to another without paying a commission to some British bank; and boards of directors can confidently pass upon transactions, aided by the inside knowledge of merchants who have lived years in the country where the business originated.

This is the merchant, this man of *stubborn enterprise and tremendous staying power*, who is our most dangerous competitor. He wields as a weapon a great part of the *mobile capital* of the world. Can the American, with his magnificent natural resources, his wonderful *inventive faculty* and celerity of action vanquish him? The prophecies of Gladstone, the writings of Bryce, Mulhall and others give answer in the affirmative.—*International Trade.*

PACKING FOR EXPORT.

It is said that American packing is inferior to that of other countries, and that American manufacturers decline to learn how to put up their goods so that they shall arrive in perfect condition. France is noted the world over for her perfect system of packing merchandise for export. Where merchandise is to be transported on mules' backs, it is necessary to put it in packages weighing about 150 pounds. Two of such packages make a load.

In the large cities of Europe and in New York, there are concerns which make a business of packing for shippers. The manufacturer who desires to secure a successful foreign trade must give the most careful attention to the packing of his wares.


SAN FRANCISCO
IN 1920
ST. PETERSBURG
OKHOTSK
PACIFIC
YOKOHAMA
CANTON
CALCUTTA
MELBOURNE
PORTLAND
MINNEAPOLIS
CHICAGO
LONDON
NEW YORK
SAN FRANCISCO
2.000.000
PHILADELPHIA
DENVER
NEW ORLEANS
TUCSON
CAPE TOWN